BODIES ONLINE:
A NARRATIVE INQUIRY-BASED CRITIQUE OF ONLINE LEARNING

CENTRE FOR NEWFOUNDLAND STUDIES

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JENNIFER HELENE BLAKEY

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BODIES ONLINE:

A NARRATIVE INQUIRY-BASED CRITIQUE

OF ONLINE LEARNING

by

© Jennifer Helene Blakey

A thesis submitted to the School of Graduate Studies in partial fulfillment of the requirements for the degree of Master of Education (Post-secondary).

Faculty of Education

Memorial University of Newfoundland

September 2003

St. John's Newfoundland and Labrador

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Ottawa ON K1A 0N4
Canada

Your file Votre référence
ISBN: 0-612-99052-4
Our file Notre référence
ISBN: 0-612-99052-4

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Abstract

Through the use of autobiographical narrative, this thesis argues that the Cartesian mind/body split characterizes the distance-learning environment, where learners and instructors are separated by distance and technology, with the resulting interaction focusing primarily on content, thereby making physical and emotional connections less likely to occur. In such situations, learners who rely on their entire bodies for learning, women in particular, may be disadvantaged. Because knowledge of the body is already devalued by the mind/body binary, online learning environments may serve to preserve traditional power relationships by excluding the body and embodied knowledge. Drawing on autobiographical data from teaching and learning experiences in online contexts, and from participation in online communities, this thesis seeks to increase awareness of the experiences of online learners and to propose suggestions for the creation of more inclusive situations.

Acknowledgments

I wish to acknowledge the following individuals who provided support, advice and encouragement throughout my educational journey.

First, my supervisor, Dr. Ursula Kelly, who persistently encouraged me to pursue my interests, to challenge my thinking, and to explore new ideas.

Secondly, my mother, Elaine Cust, who inspired me to learn and to be myself. Thank you for all of your assistance with editing and revising my work, from my first day of grade one to the last page of my thesis. You taught me that it was the journey, not the destination, that mattered.

Thirdly, to my sister, Bernadette Blakey, whose fun-loving attitude and exuberance was of stupendous support when I needed some perspective on the task of writing a thesis.

Next, to my partner, Ron Kelland, who was always there when I needed him, providing constant encouragement and support, love and laughter, and a passion for the value of reading and learning.

To all my teachers, in and out of the classroom, and to my classmates, colleagues, family and friends who allowed and assisted me to learn and grow - and who willingly discussed my thesis topic endlessly.

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Chapter 1: Introduction

Introduction

Distance learning programs are offered by many institutions and in many subjects. In Canada, learners can choose programs from the thirteen universities that form the Canadian Virtual University (CVU), offering over 250 programs and 2000 courses online (CVU, 2003b). Learners can also access courses from Canadian colleges not associated with the CVU and from institutions around the world offering courses online and via distance learning. Many learners are taking advantage of these opportunities; in 1998, 30% of households used the Internet to access education and training (Statistics Canada, 1999).

However, despite the popularity of enrolling in distance learning, the dropout, or attrition, rates in distance learning course are higher than those of traditional courses (Holmberg, 1994 as cited in Osborn, 2001; Institute for Higher Education Policy, 1999; Kember, 1995 as cited in Chyung, 2001; Verduin & Clark, 1991 as cited in Chyung, 2001) and these attrition rates can reach levels as high as 44% among online learners (Chyung). Extensive research shows the benefits of distance education (Bradley, 1998; Tsui & Yue, 2000, Vojtek & O'Brien Vojtek, 1997) and delineates how to make the distance learning environment more learner-friendly. Suggestions are varied and include introducing mentors to support learners, offering more group activities, providing flexible schedules, and customizing learning experiences to suit individual learners (Australian National Training Authority, Brisbane, 1997; Brander, 2000; Herr Gillespie & contributors, 1998; Knapczyk, Brush, Rodes & Marche, 1993; Lau, 2000; National Staff Development Council [NSDC], 2001a, 2001b; Rogan, 1997). What these practical solutions fail to

acknowledge is that the problem may be ingrained in the online learning environment and may require fundamental changes to this educational context.

As there is limited critical research available on the experiences of students in online learning, I will seek to provide such a perspective. As the title of Froese-Germain's (2001) article "A critical approach to technology ≠ an anti-technology approach: Putting education & technology in context" illustrates, a critical view of technology is not necessarily a view that is against technology. Rather, a critical approach is one that poses questions about *why* technology is employed and what value it adds (Froese-Germain, 2001). Though not acknowledged in online learning, the presence of the physical body and embodied knowledge play important roles in learning (Beckett, 1998; Belenky, Clinchy, Goldberger & Tarule, 1986; Boler, 1999; Turkle, 1984; Turkle & Papert, 1990). By examining online learning and the systematic exclusion of certain types of knowledge in this environment, in particular, knowledge that is associated with the body, I present an alternative view of the experience of online learning. In my thesis, I examine the relationship between the physical body and learning, specifically, within the context of online learning. By failing to acknowledge the presence of the body and its role in learning, the current online learning environment values certain types of learners and devalues others. As a part of this study, I present the historic and current theories of the body's role in learning; theories about the body online, in educational and non-educational settings; the experiences of learning and teaching online; and recommendations for creating online learning situations that recognize the physical body and, consequently, include a more diverse group of learners.

Purpose

The purpose of this research is to describe and examine the experience of participating in distance learning courses. In particular, the purposes of this study are to:

1. describe the lived experience of an online learner through narrative and, in doing so, provide a voice for some of the experiences of the online learner.
2. examine the role of the physical body in the experiences of the online learner and relate it to the theoretical position of the body in learning.
3. examine the experiences of tutoring students online and participating in non-educational online communities.
4. compare online tutoring practices and other online communities to the online learning environment.
5. identify the pedagogical consequences of the positioning of the body in online learning.
6. recommend policies and practices to create a more inclusive online learning environment, which recognizes the presence and the role of the body in learning.

Definitions

Key terminology in this thesis, which is defined here, includes the terms *body* and *embodiment, knowledge*, *distance learning* and *online learning*.

Body and Embody

Historically, the body has been defined biologically, resulting in a static and absolute definition that does not recognize the fluidity of postmodern perceptions (Grosz, 1994). More recent interpretations acknowledge the different roles of the body in different contexts. Birke (1999) examines the biological body, which she differentiates

from the *lived body* where questions of identity, knowledge and power are considered. The question of defining the body is further complicated by introduction of technology and machines within the body (i.e. pacemakers, genetically engineered cells, artificial limbs). The boundaries of the human body are becoming even more blurred with the blending of the human and the machine to form the cyborg (Haraway, 1991; Hayles, 1999). For the purposes of this thesis, a more inclusive definition of the body that moves beyond the biological definition to include the experiences, memories and identities of an individual, all of which are acquired through the body and stored within the body.

The related term *embody* refers to containing within or having something as part of a body. In the context of this thesis, experiences, identity and knowledge will be described as embodied, meaning they are contained within the body and are an essential part of the body.

Knowledge

Knowledge is the collection of acquired experiences, and an individual's reflections on those experiences. It is gained through interaction with ideas, objects, environments and individuals, and it is constructed through social systems. Because the knowledge of each individual is unique, it is better described by the term *personal epistemology*, meaning an individual's way of knowing. This term captures the personal nature of knowledge and recognizes that each person's experiences, and their reflections on those experiences, will produce different understandings.

Distance Learning

For the purpose of this thesis, I employ certain terminology. First, I use the term

distance learning because the use of the term *distance* emphasizes that the separation of learner and instructor has a significant impact on their relationship. I avoid the term *open learning* because I argue that this philosophy of education and delivery method are not actually accessible to all learners. I choose the phrase *distance learning* rather than *distance education* because I acknowledge that certain kinds of learning, for example, training, may be accomplished over a distance. However, it is my contention that the distance delivery environment is not conducive to education, as it was originally defined. The word *education* originated from the Latin *educere*, meaning "to lead forth," while the word *learning* originated from the Old English word *last,* meaning "footprint" and the Latin word *lira*, meaning "furrow [or] track" suggesting that learning means simply following in the path of one who has gone before (Merriam-Webster, 2003).

The term *distance learning* is also used in situations where I refer to multiple delivery methods or to acknowledge that the exact delivery method is unknown. If the specific method of delivery is available, I identify it by name as different delivery methods can create very different educational contexts.

Online Learning

I use the term *online learning* to identify different forms of computer-mediated learning relying on Internet technology because my area of interest is in online contexts where multiple learners interact and because this definition excludes other forms of computer-based learning without online components. I do not employ the term *networked learning*, as proposed by the Commonwealth of Learning [COL] (2000), because it implies the existence of stable relationships between learners and instructors, and between learners and other learners, relationships which I am not sure exist.

Context

As this thesis examines my own experiences as a distance learning student, it is important to understand the context in which they occur. I have drawn experiences from completing distance learning courses offered by three different Canadian post-secondary institutions. I supplement my analysis of my own experiences as a student with analysis of my experiences tutoring students online while I was employed at a university writing centre. A third part of the research involves my participation in online communities that are not part of an educational setting, for example, multiple user domains (MUDs) and public bulletin boards.

Distance Learner

One of my first experience in a distance learning setting was a three-hour teleconference session during my second year of university (1996). In order to better understand the experience of living in other parts of Canada, the professor arranged a presentation and question period with professors in Atlantic Canada. My next experience with distance learning occurred the following year when I took a course using videoconferencing to make it accessible at another site. However, for me, it was very similar to a traditional face-to-face course because I was taking it from the host site rather than remotely.

My next experience in distance learning happened after I had completed my B.A. degree. In preparation for my master's degree, I had to complete a statistics course. I chose to take it through a correspondence course. I completed all of the course work independently, and only made contact with my tutor to get details about the format and parameters of the midterm and final exams. While taking this course from January

through June 2000, I was working full-time. My main study time was during my lunch breaks at work.

After taking the statistics course, and while still working full-time, I completed two undergraduate education courses through distance learning. They were both offered in the Winter 2001 term. I completed one online using the WebCT program and the other by correspondence with an optional discussion group on SiteScape. WebCT and SiteScape are computer programs that provide interfaces for communication and course management. They both include tools for students to participate in asynchronous discussions. WebCT also has provisions for synchronous communication.

From September 2001 through August 2002, I completed eight courses as part of the requirements for my M.Ed. degree. Six of those courses, two in each of the terms, were online. At this time, I was living on campus at the university at which I was enrolled. All of my M.Ed. courses used either SiteScape or WebCT as interfaces. One of the courses also included three teleconference sessions. Another course had a final exam that I wrote on campus; that was the first time I saw many of my classmates. A third course was an independent study course so the online forum only allowed me to communicate with the professor because there were no other students.

Online Writing Tutor

From June 2002 through January 2003, I was employed as a writing tutor at a university writing centre. One of my responsibilities was to provide e-mail responses to students' writing questions. They submitted course assignments by e-mail and I responded by e-mail, with suggestions to help them improve their writing. Usually, I provided a set of general comments about the work as a whole, followed by in-text

comments about specific portions of the text. I referred to online grammatical sources to provide more information, and for future reference. I assisted undergraduate and graduate students in a variety of subjects. Some students submitted multiple assignments while others submitted only one piece of writing. Some students were also assisted by other tutors who also offered their comments online.

Online Community Member

In order to better understand the online environment, I examined some online communities outside of the formal educational context. I participated in some online bulletin boards, mailing lists, and chat rooms. Most of this experience occurred between January and June 2003. I had read about this use of the Internet but I had not tried it, though I had previously been involved in mailing lists.

Format

After considering numerous formats for incorporating my narrative into the content of my thesis, I decided to weave the two parts together. This approach intends to demonstrate the inherent link between theory and experience. Throughout this document, theoretical perspectives and related narrative experiences are provided. The narrative experiences are indented and presented in italic type. They are also written in informal language, while the theoretical portions are presented in formal academic style. The two cannot actually be separated as clearly as was required in this document, but a clear differentiation was necessary to make the writing easier to follow. In reality, ideas and experience link to each other in innumerable ways, but for the purpose of this paper, I attempt to connect each experience with only one theoretical comment, though other connections may be possible. I hope this writing style shows that experience and theory

are both embodied in my academic work, whether or not they are explicitly stated. What follows is the first narrative piece:

> *When I first applied for my master's degree, I had no intention of writing a thesis. My original plan was to complete an internship; I felt I needed work experience to enter the field of student services. My main motivation for completing the degree was to get a job in student services, a field in which I had some work experience but little formal academic training. The idea of writing a thesis didn't even occur to me; the thought of it was intimidating. I hoped that by taking an internship-based program, I could gain work experience while avoiding the unimaginable task of writing a thesis. I later also considered the course-based program as a way of finishing my program more quickly and getting on to other things. I was only two courses, or one term, short of my degree when I began to seriously consider writing a thesis. That consideration eventually brought me to the point of composing this first narrative piece and the many others, which are woven throughout my thesis.*

Objectives

My overall objective is to identify links between theory and lived experience relating to distance learning. An additional examination of the theory of online community development and online relationships will help develop recommendations for making the online environment more inclusive. I anticipate that my experience of being an online learner will add to the critical research about online learning by describing how the physical distance in online learning influences the learner's experiences. This physical separation will affect interactions between the learner and the instructor, the learner and

the content, and the learner and other learners. As a result, the learner will need different strategies for connecting with the instructor and other learners, and the learner will need to reexamine his or her relationship with learning and consider how to integrate the content of the course into previously constructed knowledge.

Significance of the Study

Distance learning, in particular online learning, is a growing field. However, it seems to be growing without critically examining whether this growth is, in fact, valuable and without critically examining how it affects learners. Since it appears this trend of offering education online will not be reversed, critical evaluations of this educational medium may be able to provide alternate viewpoints. Questioning the continued expansion of distance learning may result in a better understanding of the educational quality of distance learning, of the policy issues surrounding its continued expansion, and of the learners' lived experiences. Ultimately, this study could lead to acknowledgment of weaknesses in the current system, or to improvement in the distance learning system, either of which could make it more inclusive.

Overview

Each of the chapters of the thesis is named for its theme. Narrative methodology is examined in the second chapter, which includes a description of narrative research, autobiographical research and my approach to this research project. In chapter three, I examine distance learning, considering both the language used to describe distance learning and the political and pedagogical issues surrounding the topic. In the fourth chapter, I further examine issues of access and inclusivity. Chapter five is an examination of learning theory and its relationship to distance learning. In the sixth chapter, I consider

the role of the body in learning and how bodies are understood in online communities. Finally, chapter seven presents reflections on the experiences described in my narratives and recommendations for more inclusive distance learning settings. In addition, each of the chapters following this one begins with a narrative piece describing my experiences writing my thesis. These chapter openings also provide a chronological account of writing this thesis.

Chapter 2: Narrative Research

As I completed the course work for my M.Ed. degree, I was sure that I did not want to write a thesis. I was becoming increasingly disillusioned with the academic system, and the prospect of producing another academic paper to fit a set of arbitrary guidelines, unrelated to my personal experiences and interests, was not appealing. The twelve months I spent working, mostly online, to complete the course requirements of the degree did not meet my, possibly idealized, image of graduate work, which I expected would include discussion and application of course material outside of the classroom, exploration of new ideas and experiences, participation in a community of scholars, and a collegial environment. None of these had materialized. In fact, I felt invisible to many of my classmates and unconnected to them and to my professors. Essentially, I had been working independently and in isolation on my studies for most of my courses, and undertaking more individual study through a thesis did not meet my personal, professional and academic needs.

Introduction

First dictionary definition of narrative: "a story or a description of a series of events" (Cambridge University, 2003)

Second dictionary definition of narrative: "a spoken or written account of something" (Pollard & Liebeck, 2000, p. 536)

When I first heard about the narrative approach to education research, something inside me clicked. This method acknowledged the value of my experiences and let

me share them, which I had been unable to do in most of my graduate courses. It seemed like a great way to connect theory and experience, which was something I felt had been missing in online graduate courses. At the same time, an autobiographical narrative was risky; I would be putting my experiences on the line for consideration by, and criticism from, other readers. After my words were on paper, they would be accessible to anyone, and I would no longer have control over them. I wouldn't be able to select the audience, nor could I be there to clarify and explain any misunderstandings. Nonetheless, I chose this research method.

This thesis relies on narratives, or stories, drawn from my own experiences. Hence, it is classified as an autobiographical narrative work. In that context, it is necessary to provide an overview of narrative theory and the applications of this methodology. The following literature review defines the narrative, examines different types of narratives, explains the process of narrative research, identifies reasons for employing a narrative approach, discusses the autobiographical narrative, and establishes my own approach to this narrative project.

What is a Narrative?

Narrative methods are used in numerous research contexts. The use of narratives is particularly popular across a range of domains within the social sciences; however, individual disciplines have adapted narrative research for their own uses, resulting in a wide variety of methods employing narratives (Mishler, 1995; Creswell & Maietta, 2002). In addition to applications, internationally, in psychology, sociology, anthropology, history, and education, these methods can even be found in "scientific accounts" (Mishler, p. 89). However, rather than grouping all narrative methods under

the heading of "narratology" (Mishler, p. 88) or the study of narrative, Mishler sees narrative research as a number of unique approaches developed by different disciplines for different purposes. The process of defining one narrative method would result in a loss of the depth and the range of narrative methods; instead he envisions the study of narrative as a "problem-centred area of inquiry...[that] will always include a multiplicity and diversity of approaches" (p. 88). Explanations for the popularity of narrative research in such diverse situations include giving a voice to "individuals whose voices may not be heard in the research literature" (Creswell & Maietta, p. 149), exploring the knowledge of individuals, providing therapeutic benefits, and understanding individuals and their experiences (Clandinin & Connelly, 2000; Cortazzi, 1993 as cited in Creswell & Maietta; Stuhlmiller, 2001).

In the broadest sense, narratives are stories, the fictional and nonfictional accounts of experiences told by narrators. In the more specific narrative research situations, narratives are the stories of lives, or specific events, as recounted by a narrator, or in research terms, the participant. Within the narrative, one can identify the components of a story: "time, place, plot, and scene" (Connelly & Clandinin, 1990 as cited in Creswell & Maietta, 2002, p. 150). However, beyond this broad, simplistic definition of the narrative as a story, it is more difficult to define the narrative precisely.

Different researchers and different disciplines provide different definitions of the term *narrative*. Mishler (1995) argues that there must be a connection within a narrative, and he states that not all the information provided by a research participant is necessarily a narrative. In order to be defined as a narrative, an account must "refer to culturally meaningful and recognizable boundaries of a passage, to 'openings' and 'closings' that

give a stretch of talk or text a unity and coherence" (Mishler, p. 91). More concisely, there has to be connection within the material, it "must have a point" (Mishler, p. 91). Clandinin and Connelly (2000) offer a different perspective. They offer a "working concept" (p. 20) of the narrative: "narrative inquiry is a way of understanding experience. It is a collaboration between researcher and participants, over time, in a place or series of places, and in social interactions with milieus" (p. 20). Unlike Mishler's definition, Clandinin and Connelly's definition acknowledges that narratives serve a purpose by providing understanding to both researcher and participant. These authors also acknowledge that narratives occur within a larger social structure, one that provides more than just the definitions of "openings" and "closings" that Mishler describes. While many disciplines strive for objectivity in research, narrative researchers often acknowledge the influence of their own cultural perspectives. In one example, Mishler describes how, because ethnographers strive for objectivity in their accounts, their narratives have been critiqued for employing dominant Western paradigms to describe other cultures. The critics claim that the ethnographer can not be neutral; he or she will always be influenced by his or her own cultural perspective.

Types of Narratives and Narrative Research

Specific types of narratives include the "twice-told narrative" (Young, 2001 as cited by Anglia Polytechnic University [APU], n.d.) where multiple perspectives on an event are analyzed; life histories, which describe an entire lifetime of the narrator; biographical and autobiographical narratives where the researcher may rely on archival resources and other research material to supplement the narrative; and teacher and student narratives, which provide insight into the educational setting by considering multiple

points of view (Creswell & Maietta, 2002, pp. 148-149).

In an attempt to create a typology of narrative analysis, Mishler classifies narrative research based on "similarities and differences in problems addressed and methods used" (1995, p. 89). The result of his consideration of narrative research in the social sciences is the categorization of approaches into three groups based on ordering of events, narrative strategies and narrative functions. His research provides a clear overview of the depth and breadth of narrative approaches, which adds credibility to this methodology. Of the three categories Mishler develops, the first is most pertinent in this research project. Next I review his system of classification because it illustrates the diversity of narrative approaches and applications.

Mishler's first category focuses on narrative methods that examine "reference and temporal order" (1995, p. 90). It includes research methods that organize narrative based on the order of events as they occurred, "the told" (p. 90); and the order of events as they are described, "the telling" (p. 90). He offers four further subcategories that each define the relationship between the told and the telling differently: "recapitulating the told in the telling," "reconstructing the told from the telling," "imposing a told on the telling" and "making a telling from the told." The first subcategory relies on a "linguistic approach" (Mishler, p. 92) and assumes a direct correlation between the order of the told and the telling. Specifically, Labov and Waletzky state: "the semantic interpretation of a narrative, as we have defined it, depends on the expectation that the events described did, in fact, occur in the same order as they were told in" (1967, p. 30). In the second subcategory of narrative methods, the researcher recreates the order of events from the narrator's telling of the story. Since a narrator may not recount a story chronologically, it

is the researcher's responsibility to "reassemble selected episodes from interviews" (Mishler, p. 95) to form the narrative, thereby creating the events (the told) from the story (the telling). Researchers in the third subcategory prescribe the order of the telling of the story by giving the narrators a structure for their stories through a list of questions, or the researcher may employ a "[standardized] ... format for eliciting accounts" (p. 99). This approach allows the researcher to compare the responses of multiple respondents who have organized their stories (tellings) according to the researcher's imposed order of events (the told). The last subcategory is employed in the field of history, sociology and political science where researchers use narrative patterns to describe major events. They create stories (tellings) from the events (the told), unlike in the other three situations described. As Mishler explains: "it is [the researcher's] telling that is the story" (p. 102).

Mishler's second category of narrative approaches is grouped around a common focus on the use of language in the narrative. Mishler (1995) titles this category "textual coherence and structure: narrative strategies" (p. 90). Relying on "structuralist and poststructuralist models of literary analysis and theories of grammar" (p. 102), researchers study how language is used, rather than studying the ordering of the events in the story. The first subcategory Mishler identifies is "textual poetics: figurations, tropes and style" (p. 104). Encompassed in this category are examinations of the relationship between the "story," the "text," and the "narration" (Rimmon-Kenan, 1983 as cited by Mishler, p. 104) where the story is the actual events, the text is the description of the those events and the narration is the method of using language to recount the events. As Rimmon-Kenan explains, while the text is "directly available to the reader," (p. 4 as cited in Mishler, p. 104), the story and the narration can only be examined through the text.

The other subcategory focuses on oral narratives and "discourse linguistics" (p. 105). Using Gee's (1991) research, Mishler describes how oral accounts can be divided and organized by "Idea Units marked by a single intonation contour" (p. 106). These units form a structure of "Lines, Stanzas, Strophes, and Parts" (p. 106) organizing ideas from specific to general.

Mishler's (1995) final category of narrative research focuses on "narrative functions [specifically] contexts and consequences" (p. 107). Researchers relying on this approach acknowledge social and cultural traditions influencing narratives. The first subcategory, "narrativization of experience" (p. 108), examines the role of the narrative in understanding experiences, identity development, learning and memory. The second subcategory is primarily concerned with narratives in ethnography. By studying "narratives and culture [including] myths, rituals and performance" (Mishler, p. 110), ethnographers tell the stories of the cultures they study. The third subcategory examines the role of "storytelling in interactional and institutional contexts" (p. 111) as researchers study how stories are used to transmit information, values and behaviours. They also consider the contexts in which stories are told, including who tells the story, who listens and in which settings the tellings occur. The final subcategory examines "the politics of narratives: power, conflict, and resistance" (p. 114). Using Boje's (1991) research, Mishler explains how "ownership rights and the framing and legitimating of particular versions of organizational events and histories" (p. 114) have a significant influence on a society. Mishler identifies the positivist, scientific method and current legal practices as examples of dominant narratives. In response to the dominant or "master narratives" (p. 114) which conserve traditional power relationships, feminist and postmodernist

researchers are proposing "counter narratives" (Cohn, 1987, p.711 as cited in Mishler, p. 115) which acknowledge gender, race, culture and other factors.

Conducting Narrative Research

Before, and while conducting research, the researcher must identify his or her position within the research context. To facilitate the conceptualization of the researcher's position, Clandinin and Connelly (2000) describe inquiry as taking place within a two-dimensional space. The first dimension refers to whether the inquiry is "internal," concerned with "feelings, hopes, aesthetic reactions, and moral dispositions" (p. 50) or "external," referring to "existential conditions, that is, the environment" (p. 50). The second dimension deals with time, which can be either "backward or forward" depending on whether it refers to the "past, present, [or] future" (p. 50). Within this framework of inquiry, the researcher proceeds by considering both personal and social aspects of the research, within the past, present and future. These researchers also recognize place as a third important factor in positioning inquiry. Place can refer to either a geographical location or a theoretical perspective. A fourth factor is the relationship between the researcher(s) and the participant(s); it must be negotiated and renegotiated throughout the research process. Negotiation of purposes, roles and transitions must also occur as situations change and projects progress (p. 75). The researcher's understanding of his or her position will change throughout the research, and must be reevaluated periodically. While simultaneously examining, identifying and negotiating these four factors, the researcher must also conduct his or her research.

Creswell and Maietta (2002) offer four guidelines for conducting narrative research. First, the researcher must identify what to research, namely, the research

question or problem. It must include a desire to collect stories from an individual or multiple individuals. Unlike in positivist research methods, the researcher does not propose a hypothesis for confirmation and the research question may change as the research occurs (Clandinin & Connelly, 2000, p.73). Secondly, the researcher needs to select the participant or participants and collect their stories. The collection of stories can occur through participant interviews, written accounts, or observation. Other research material can be collected from people who know the participants, correspondence, photographs, and "other personal-family-social artifacts" (Creswell & Maietta, p. 150). Next the researcher organizes the materials chronologically to create a story. The researcher may also identify themes that reoccur. Finally, the researcher and participant work together to negotiate throughout the process of collecting, analyzing, and presenting the material (Creswell & Maietta, p. 150).

Depending on the researcher's objectives, the narrator may be given more or less flexibility while telling his or her story. At one extreme, the narrator describes his or her experiences and feelings in any order or style. This approach can be applied in either an oral interview or a written journal. At the other extreme, the narrator may provide a "subset of possible pathways" (World Health Organization, 1992 as cited in Mishler, 1995), thereby limiting the narrator's options. Between these two extremes are numerous approaches. In one situation, the researcher may prompt the narrator to start telling a story during which the researcher may ask clarifying questions. In another situation, the researcher may conduct a series of conversations with the participant or may even gather stories from a group of participants.

While many cultures rely on oral traditions to share stories, not all narratives are

transcribed from oral accounts. Written narratives can also be used by researchers; in these situations, the narrator is asked to write his or her narrative rather than provide a verbal account. Written narratives, instead of, or in addition to, oral narratives, are one way of addressing the problem of privileging the spoken word and "the verbally articulate" (Jaffee, Kling, Plant, Sloan & Hyde, 1999, p. 424).

Analyzing Narratives

Once the narrative(s) is collected and recorded, the researcher performs an analysis to find common themes among the narratives of one or many narrators. Labov and Waletzky (1967) provide one of the earliest systems for analyzing narratives. They rely on a "formal" and "functional" (pp. 12, 13) approach to construct a chronologically accurate narrative based on narrative clauses. Rather than focusing on the content of narratives, the analysis by these authors is structural in nature, relying on numerical ordering of clauses and graphical representations of their structures. From their studies, these researchers identify five components of a narrative: orientation, complication, evaluation, resolution, and coda.

More recently, Gee (1991) provides another method of analysis: describing the structure of the narrative by identifying "idea units" which are classified as lines, stanzas, strophes and parts (Mishler, 1995). Another recent approach is provided by Connelly and Clandinin (1999). They state that a researcher must start with "field texts," which are then revised and interpreted to form "research texts" (p. 137). Creswell and Maietta (2002) explain that the researcher must "'retell' or 'restory'" (p. 149) the story into a sequential order. Through the revision process, and "the intermingling of the researcher's outlook and points of view" (Connelly & Clandinin, p. 138), the field texts acquire an

autobiographical component from the researcher who inserts his or her "voice" and "signature" (p. 138). The resulting research texts contain valuable theoretical information (p. 132). While Chatman (1990) identifies four types of texts, "descriptive, expositional, argumentative, and narrative" (as cited in Connelly & Clandinin, p. 139), Ollernshaw and Creswell (2000) add that a narrative must include "[a] problem, characters, [a] setting, actions, and [a] resolution" (as cited in Creswell & Maietta, p. 149).

Theoretical Positioning of Narrative Research

Theoretically, narrative research is associated with social-constructionist (Gergen, Chrisler & LoCicero, 1999) and feminist research. While there is no universal feminist research approach (Jaffee et al., 1999; Tite, 2000), narrative research is one of many methods employed by feminist researchers. First, narrative research is a way of providing a voice to research participants who are usually not represented in research (Creswell & Maietta, 2002; Tite, 2000). Second, consistent with feminist research methodologies, the narrative method recognizes that research is not an objective activity. In fact, it is a process that requires emotional involvement by the participant, as well as the researcher (Creswell & Maietta, pp. 149, 150). Throughout the research process, the researcher must reflect, not only on the narrator's stories, but also on his or her own experiences as a researcher (Creswell & Maietta, p. 150). Third, the narrative approach requires the researcher and participant(s) to work together, as equals, throughout the research process. It is also necessary to have ongoing collaboration between the narrator and researcher, so as to develop and interpret the narratives (Creswell & Maietta, p. 150).

Why Employ a Narrative Approach?

Clandinin and Connelly (2000) argue for the use of the narrative approach because

narratives are already used as a way to understand the world: "life ... is filled with narrative fragments, enacted in storied moments of time and space, and reflected upon and understood in terms of narrative unities and discontinuities" (p. 17). It is also an approach that supports the social scientist's objective of understanding the "human experience" (p.17) because "narrative thinking is a key form of experience and a key way of writing and thinking about it" (p. 18). Similarly, Creswell and Maietta (2002) state the researcher can apply John Dewey's theory that understanding the experiences of an individual allows for an understanding of the individual, which is an important characteristic of constructivist educational theory. In addition to these arguments for narrative inquiry, Clandinin and Connelly recognize its value in representing the complexity of experiences, particularly "healthy, productive, human relationships" (p. 18).

Autobiographical Research

Autobiographical research has historically been employed in educational research, though it has recently shown an increase in popularity (Connelly & Clandinin, 1999, p. 133). This methodology blurs the line between researcher and research subject because one person occupies both roles. The sharing of roles allows the researcher unique insights into the research subject. Clandinin and Connelly (2000) argue that the experiences and insights of the researcher are an essential part of the narrative research process, whether the research is categorized as autobiographical or not.

On one hand, Clandinin and Connelly explain that this approach considers the big picture; it allows the author to "to write about the whole context of life" (2000, p. 101). On the other hand, this approach makes research more personal and more relevant to an

individual's experiences. This may be one reason why it appeals to feminist and post-colonialist researchers (Denzin, 1999); it is a way of opposing positivist methods and acknowledging the experiences of the previously silenced individual. In this vein, Tompkins explains the benefits of writing about her experiences: "what I take from them is courage to speak the truth about my experience and the hope that what I record here will render the experience of others more alive" (1996, p. xiii). Furthermore, participating in autobiographical research is a chance for self-reflection and self-discovery. Grumet (1988) also describes the personal benefits of her autobiographical writing:

> As we study the forms of our own experience, not only are we searching for evidence of the external forces that have diminished us; we are also recovering our own possibilities. We work to remember, imagine, and realize ways of knowing and being that can span the chasm separating our public and private worlds. (p. xv)

Similarly, some researchers recognize the desire to perform autobiographical research as a search for personal understanding. "According to [philosopher Anthony Paul] Kerby, the animating impulse behind autobiography is the individual's desire for meaning, wholeness, and unity" (Keeves & Lakomski, 1999, p. 120).

Autobiographical research is critiqued by positivist researchers for its lack of objectivity. However, narrative researchers argue that subjectivity is an asset of any methodology when researchers recognize that inherent subjectivity. Furthermore, Grumet states, writing narratives is not about developing external systems but about describing and understanding inner experiences: "we are seeking not an illustration of our categories but the dialectic interplay of our experience in the world and our ways of thinking about

it" (1988, p. 67). Denzin affirms that both biography and autobiography "rely upon the subjectivity, verbal, and written expressions of meaning given by the individuals studied; these expressions being windows into the inner life of the person" (1999, p. 94).

With the subjectivity inherent in this research methodology, the researcher must be aware of the subjectivity and position his or her work explicitly within a subjective context. It is essential to acknowledge that each narrative represents "a particular reconstruction of an individual's narrative, and there could be other reconstructions" (Connelly & Clandinin, 1988, p. 39 as cited in Clandinin & Connelly, 2000, p. 101). Denzin also emphasizes the multiplicity of interpretations of any experience: "there is no truth in the painting of a life, only multiple images and traces of what has been, what could have been, and what now is" (1999, p. 99). Due to the numerous potential interpretations of an event and the "nuanced" (p. 141) quality of memory, the researcher must be careful about reducing any one "interpretive rendition" into an "asserted fact" (Clandinin & Connelly, p. 142). Autobiographical research, like other research, serves a purpose and attempts to prove a theory; therefore, autobiographical research texts "are written for one or other purpose (*sic*), thereby emphasizing one or other narrative theme (*sic*)" (Connelly & Clandinin, 1999, p. 136).

To balance the presence of subjectivity in autobiographical research, there are guidelines for ensuring the integrity of the research (Bullough & Pinnegar, 2001) and the reliability of the data collected (Griffiths, 1995; Howard, 1992). Connelly and Clandinin confirm that the interpretive nature of autobiography "does not undermine the validity of the research provided its purposes are clear and its relationship to the field is established" (1999, p. 137). One method which makes autobiographical research appear less personal

and, consequently, more objective is to write the research text in the third-person (Denzin, 1999). But, ultimately, whatever arguments are presented, both "autobiography and memoir are recognized forms of research texts" (Clandinin & Connelly, 2000, p. 101).

My Approach to the Narrative Method

I selected a narrative approach, first, because it complements the feminist and social-constructivist themes of my research. One of my goals is to examine how the online learning environment tends to value certain learners, particularly men more than women. Secondly, throughout my paper, I am trying to understand the experiences of the individual participating in online learning. The narrative approach is recognized for its value in documenting and understanding experience. Third, one of my reasons for writing this thesis is to validate as well as analyze my experiences; writing and analyzing my stories helps me to recognize their value, and my value. As a result, I have the opportunity to reflect on my experiences and their ongoing impact on my life. Finally, I have found myself retelling, in various contexts, the story of how I became a distance education student. Whether seeking support, encouragement or change, I frequently described my experiences in stories, the story of moving to Newfoundland, the story of registering for classes, the story of forming study groups, and many other stories. Perhaps people were curious about my experiences and I felt a desire to share them due to the fact that my story was different from that of the "typical" graduate student, and, therefore, unfamiliar to many.

My personal approach to narrative writing and analysis falls within the first category of Mishler's typography. Specifically, my focus is on his second subcategory, creating the told from the telling, because my stories did not come in any order or pattern.

I am collecting my stories in handwriting and writing on the computer. Some are reflections on current experiences as they happen while others rely on "memory relationships" (Clandinin & Connelly, 2002, p. 57). I have not tried to organize them in any particular order; rather, I have written them as they have come to me. In some cases one story has lead to another. Eventually, I will organize them thematically in combination with the theoretical content of my thesis to get a comprehensive view of my experiences. I will then search for recurring themes and common experiences. I will also draw on the feminist use of narrative, which Mishler describes in his third category, to explore my experiences as a female learner.

According to Clandinin and Connelly's (2000), research should be positioned on a two-dimensional grid with time on one axis, and internal and external relationships on the other. I am starting from the present and looking back on my internal experiences as a distance education student. My personal reactions make me wonder about the nature of the reactions of other students. I also wonder if there are ways to change online learning, in the future, to benefit learners. I am also looking back at my external interactions with other students, faculty members, technology and educational material. These interactions have influenced me in the past, are influencing me in the present and may influence my future educational goals. Participating in online communities while I write my thesis is an experience in the present that was triggered by experiences in the past. I will try to compare these two sets of experiences, with the goal of making recommendations for the future. In addition to these recommendations, which will be published, I will be reflecting on how I want to incorporate this learning internally. Clandinin and Connelly also identify place as an important factor; in my inquiry, place will include both physical and

virtual locations. I participated in online learning from the geographical locations of Red Deer, Alberta and St. John's, Newfoundland and Labrador; however much of my interaction with other learners occurred online, in "cyberspace." The qualities of cyberspace are much harder to define and describe, perhaps because they are so dependent on the individuals gathered in that "space."

Ethical Considerations

As there are no specific guidelines regarding autobiographical research in the Tri-Council Policy Statement, I use the guidelines for naturalistic observation (article 2.3 of Tri-Council Policy Statement) to ensure the appropriate precautions are taken for anyone who may be mentioned in my descriptions. The research does not take place in a situation staged for the purpose of this study nor does the method of recording allow individuals to be identified. Furthermore, to protect the identity of other individuals mentioned in the descriptions of my experiences, I use pseudonyms and identifying details are avoided. According to Article 2.3 of the Tri-Council guidelines, this type of research is of "minimal risk." An ethical review of this project was approved by the Interdisciplinary Committee on Ethics in Human Research at Memorial University of Newfoundland.

Chapter 3: Distance Learning: Political and Pedagogical Issues

My eventual decision to write a thesis occurred when I realized I hadn't got everything I wanted out of my master's degree courses. First, I didn't feel I had met my own personal goals and the online courses left me with the feeling that I missed something. The extra time it would take to write a thesis would allow me more time to be a student and to feel part of the university community. Secondly, the professor of one of my face-to-face courses prompted me to think about my academic goals. I realized there were still ideas I wanted to explore and academic contributions I wanted to make. Writing a thesis would provide an opportunity to study what I wanted rather than to do only those activities assigned by my professors. The thesis option seemed a good opportunity to make up for what I felt I had missed as an online student, and to make the most of my master's degree program.

Introduction

Distance learning is described in different language in different situations. Understanding factors that influence vocabulary choices is essential to understanding some of the politics of distance learning. The first section of this chapter examines these issues of vocabulary, and the second section of the chapter examines relationships between government, business, post-secondary institutions and distance learning. The final section of this chapter examines pedagogical issues around distance learning.

The Language of Distance Learning

Language is important in understanding relationships between ideas and common

perceptions about ideas. As Lakoff and Johnson (1980) explain, the conceptual systems developed through language, specifically metaphors, influence "our everyday functioning, down to even the most mundane detail" (p. 3). Because of the extensive influence of language it is important to examine how concepts are named and to recognize how their naming influences the ways they are perceived. This process of naming is especially important in situations where context and political situation influence naming because that naming then influences perception. The distance learning field is one area where the use of language is influenced by regional contexts and political agendas. Consequently, various terms are used to describe a concept, each bringing its own regional and political context, which can affect how a concept is understood and perceived.

Important Definitions

One important set of definitions and distinctions for this research is the vocabulary related to distance learning and online learning. Distance learning is the more inclusive of the terms, encompassing all forms of education where learner and instructor are separated by distance. In some situations their interactions may also be separated by time (asynchronous communication); in others, they will not be separated by time (synchronous communication). Within the scope of distance learning, one may find print, audio, video and digital technologies ranging from correspondence courses, to teleconferencing and videoconferencing, to interactive web-based, online learning (Picciano, 2001). Online learning is a subset of distance learning. It refers only to distance learning situations where the distance is bridged by computer-mediated communication and Internet technology. Online learning may have synchronous components, such as computer conferencing or Internet relayed chat, and asynchronous

components such as e-mail messages, web discussion forums, mailing lists, and web sites. In addition to variety in the types of communication components, a wide range of computer programs and software can be used to connect learners and instructors. These media can vary from basic text based messaging to more complex graphic-based multiple user domains (MUDs). In some cases, online learning may also be supplemented by other elements of distance learning, such as teleconference sessions.

Terminology

Numerous sets of terminology are used in the field of distance learning as identified by the Commonwealth of Learning [COL] (2000): "correspondence education, home study, independent study, external studies, continuing education, distance teaching, self-instruction, adult education, technology-based or mediated education, learner-centred education, open learning, open access, flexible learning and distributed learning" (p. 2). As the following examples illustrate, the choice of terms depends on geographic location, method of delivery, and political agenda.

First, different nomenclature is employed in different countries and continents, such as Canada, Europe and countries in the developing world. In Canada, the terms *distance education* or *distance learning* seem to be most frequently employed by post-secondary institutions. The Canadian Virtual University (CVU) uses this terminology, as do all of its eleven English-language institutions[1]. However within Canada, the Open Learning Agency of British Columbia, provides distinctly different definitions for the

[1] On April 14, 2003, I performed a visual survey of the web sites of the eleven English-language institutions, which link from the Canadian Virtual University web site (CVU, 2003a). All used the terms *distance learning* or *distance education* in their posted materials. With the exception of the BC Open University, which only used the term *open* in its name, the term *open* was not noted as a method of delivery. The University of Brandon, through the Campus Manitoba web site, used the additional term *distributed learning*.

terms *open learning* and *distance learning*. *Distance learning*, according to the Open Learning Agency, refers to "learning carried out by a student who is separated from the institution or person organizing the instruction" (1994) while *open learning* refers to "an instructional system in which many facets of the learning process are under the control of the individual learner who decides what and how to study, usually under some form of guidance" (1994). According to these definitions, open learning does not necessarily require input from an instructor or facilitator. In fact, it could include entirely self-directed learning projects.

In European contexts, the term *open learning* is more common. According to COL, open learning is "an educational philosophy that also emphasises giving learners choices about media, place of study, pace of study, support mechanisms and entry and exit points" (2000, p. 23). One particular example of the use of this terminology is the Open University in the United Kingdom. In this case, the use of the term *open learning* may be due to the use of study centres where students and tutors meet, thereby eliminating the distance factor and offering the learner more choices in delivery method. This choice of terminology may also be due to the institution's philosophy of making education available to all students rather than to its delivery method. According to the institution's web site, "there are no formal entry requirements for most undergraduate courses" (The Open University, n.d.). In other situations, the use of the combined terms *open and distance learning* or *ODL*, is also common. By using both terms, the concepts of learner control (open learning), and separation of instructor and student (distance learning), are both included. COL provides a definition of these combined concepts:

Open and distance learning: a way of providing learning opportunities that is

> characterised by the separation of teacher and learner in time or place, or both time and place; learning that is certified in some way by an institution or agency; the use of a variety of media, including print and electronic; two-way communications that allow learners and tutors to interact; the possibility of occasional face-to-face meetings; and a specialised division of labour in the production and delivery of courses. (2000, p. 23)

The German FernUniversität provides a third illustration. For this institution, the choice of the name "Distance University" reflects the academic requirements which are not "open," as is the case in United Kingdom, but are rather the equivalent of those of other universities in the country. Because of these admission requirements, the institution is not open to all students (von Prümmer, 2000, p. 5). In this case, the university is clearly stating that it does not offer "open access," which is a "way of providing learning opportunities that implies a lack of formal entry requirements, prerequisite credentials or an entrance examination" (COL, p. 23). In developing countries, the preferred term is *distance education*. As Perraton explains, "in much of the developing world, the term 'open learning' is hardly used, perhaps because it suggests openness to entry requirements, seldom a popular idea" (2000, p. 13).

In the same way as institutions from different geographical locations use a variety of descriptive labels for distance learning, they also employ multiple ways of describing delivery methods. Online learning is also described as e-learning, computer-mediated learning and web-based learning. Not only are many different terms employed, but the definitions of these terms also vary. For example, the University of Regina uses the term *online learning* to include "any lecturing, teaching, seminar instruction and library

instruction, and laboratory material which is delivered by any electronic media" (as cited by NGC, 2001, p.1). In another case, Saint Mary's University uses the more inclusive term "technologically mediated course offerings" to refer to "credit courses ... which are presented by teleconference, videotaped, recorded, broadcast or televised; or are transmitted or received by satellite, the Internet or World Wide Web" (as cited by NGC, 2001, p. 1). Similarly, COL defines *technology-based or mediated education* as "systems of teaching and learning in which a technology other than print has a major role ... [and which] takes two major forms: stand-alone (for example, computer-assisted learning and computer-managed learning) and conferenced (for example, audio, video or computer)" (2000, p. 4). A third example of terminology is *networked learning*:

> in which learners and instructors use computers to exchange messages, engage in dialogue and access resources; the interaction can occur in real-time (synchronously) when learners and instructors are communicating at the same time from different places, or in delayed-time (asynchronously) when they are not linked at the same time. (COL, 2000, p. 22)

In addition to systems employing computer technology, some institutions offer delivery methods, such as correspondence courses, which rely on print material delivered by mail without additional technological support.

Finally, the vocabulary in the field of distance learning is affected by political agendas. As Perraton (2000) explains, choice of terminology can be influenced by political bodies. He provides definitions adopted by the World Bank and the European Commission. In both cases, the vocabulary chosen by these organizations influences Perraton's own language. While some choices of terminology are based on the legitimacy

associated with large, international organizations, equally important are the choices of terminology based on financial reasons. As Perraton states "The European Commission has adopted the term 'open and distance learning' to cover work that would fall within either of these definitions. Language follows funding and I have generally followed European usage in this chapter" (Perraton, 2000, p. 13). As this comment suggests, it is not only the educational provider who shapes distance learning.

Multiple Agendas: Government, Business and Post-secondary Institutions and Distance Learning

Three groups, other than the learners, are stakeholders in distance learning. Government, the private sector, and post-secondary institutions all play roles in the promotion and delivery of distance learning. Each of these stakeholders has its own reasons for involvement; that is, they each have their own agendas. Recognizing the motivations of all three groups is important because their goals sometimes conflict with each other and with the learner's goals:

> the potential for profit is contributing, consciously or unconsciously, to the current tendency for business leaders and politicians to denigrate public education and advocate for the educational private sector. Awareness of the potential educational power of the Internet and the Web, the increasing cost-effectiveness of the technology to carry out distance education and the potential student demand, has suddenly burst upon the business world (Maddux & Johnson, 2001, p. 11)

Government and Distance Learning

Government is the first stakeholder; at all levels, governments are involved in distance learning through financing and promotion. The Canadian government has a web

site dedicated to promoting learning technologies (see Human Resources Development Canada, Office of Educational Technologies, 2002). Around the world, governments support distance learning and its capacity to "democratize" education through increased accessibility. The use of technology is seen as a universal solution to problems (Shade, 2002, p. 109). In fact, however, governmental support of distance learning is more likely prompted by financial and social control factors. As Perraton states:

> there is an alternative explanation for government investment, especially in open universities: that it provides a safety valve, apparently reducing unsatisfied demand for education, with the minimum of resources and little concern for the effectiveness of that education. Open and distance learning may be there to satisfy a demand or to contain it. (2000, p. 181)

This author suggests that distance learning may allow government to maintain social control while having the appearance of making education available. As Perraton later states:

> We can interpret the growth of open and distance learning as something that has provided education to thousands, even millions, for who it would not otherwise have been available. Many have been disappointed by what was on offer. But others have benefited and we can interpret this widening of education as a move towards equity. The alternative view is harsher. Open and distance education is regarded by students and ministries of education as a second-rate system used to offer a shadow of education while withholding its substance. It is an inefficient but cheap way of containing educational demand without meeting it. Through its existence it helps [shield] the elite system from pressures that might otherwise

threaten its status or its way of working. (p. 200)

Business and Distance Learning

The business community, the second stakeholder, is increasingly involved in distance learning through partnerships with educational institutions and through the development of new products, services, and private educational programs. Their involvement is not surprising; this field is very lucrative. In the year 2000, "online learning companies took in about 500 million dollars" (Maddux & Johnson, 2001, p. 11). Estimates for 2003 are as high as 7 billion dollars, with increases forecast for each subsequent year (Merrill Lynch, as cited by Maddux & Johnson, p. 11). With such impressive profits, it is hard to argue that business is involved for reasons other than profit. Maddux and Johnson ask a similar question: "With potential profits in the billions, is it reasonable to think that business is honestly interested in reforming *public* education?" (p. 12). With business involvement, education becomes increasingly influenced by the private sector, which is motivated by profit, not by providing quality education. Maddux and Johnson further state, "the irony is that while these [technological] developments have the potential to revolutionize education in positive ways, they also contain the seeds of destruction of public education as we know it" (p. 11). Some argue that, as this trend towards privatizing education continues, there will be increasing numbers of diploma mills offering educational programs with little concern for academic integrity (Maddux & Johnson; Noble, 2001).

In addition to threatening public education systems, the private sector's involvement in distance learning raises other concerns. It produces profits through selling technological equipment and services. First, distance learning provides profits through

selling televisions and computers because it encourages the "privatised family" (Morley, 1994, p. 101 as cited in Tait, 1994, p. 35) which relies on technology to connect with the world, specifically computers, televisions, etc. Secondly, distance learning increases the market for selling knowledge. As Tait explains, "[online and distance education are] hastening the process of the commodification of knowledge. ODL is seen as 'a new form of market mechanism for the distribution of knowledge' (Fox 1989, p. 369)" (1994, p. 33). Thirdly, distance learning, in particular online learning, creates a need for professionals with technical skills. As Perraton describes, "computer technologies are influencing the curriculum in order to provide a computer literate population as well as the computer specialists who will lead, baffle or guide it" (2000, p. 11). In the educational context, products including "hardware, software and 'content'" are sold to institutions by "[computer companies,] cable companies... and the edutainment and publishing companies" (Noble, 1998).

In some situations, students are becoming commodities as exclusive access to educational markets is sold to companies. For example, the University of Alberta granted Coke the exclusive right to sell its products on campus (Ciccocioppo, 1998). Many other campuses have signed similar deals with business (Ciccocioppo). Students are also being sold as unknowing test subjects. As Noble explains, "in Canada, ... universities have been given royalty-free licenses to Virtual U software in return for providing data on its use to the vendors.... Students enrolled in courses using Virtual U software are in fact formally designated 'experimental subjects'" (1998).

Post-secondary Institutions and Distance Learning

Post-secondary institutions, the major providers of distance learning, are the third

stakeholders in the delivery of programs. In Canada, the thirteen universities that form the Canadian Virtual University offer over 250 programs and 2000 courses online (CVU, 2003b). This figure does not include public education opportunities offered by colleges and other public institutions nor those offered by private educational providers. This figure also excludes primary and secondary educational programs offered at a distance.

Institutions develop and provide distance learning opportunities for numerous reasons. One of the primary reasons, as Noble explains, is financial. Offering distance learning programs allows the university to compete with private companies who offer distance learning programs. Institutions hope to improve their images by introducing technology and distance learning programs (Knipe & Lee, 2002, p. 302), which may be a successful strategy in this culture where technology is equated with intelligence and success. Bey explains that "since we now assume that computers represent a step toward artificial intelligence, we also assume that buying a computer makes us more intelligent" (2001, p. 117). Providing distance learning also allows institutions to draw their students from a larger base population and to open new markets that extend beyond the boundaries of the institution's home city or province. It may even allow for an increase in international enrollment. As Cyrs illustrates, "many academic administrators act as though distance learning was their field of dreams. Build the teleclassrooms, purchase the latest technology and the students will come" (1997, p. 1). With this optimistic view of the future, educators are moving forward in the implementation of new technologies without concern for research and understanding of the implications of that technology (Moore, 1998, p. 6).

As distance learning expands, there is the risk of technology becoming more

important than the learning-centred principles it claims to embrace (Moore, 1998, p. 6). In the process of expansion, distance learning also imposes limitations, especially on learners. For example, the Open University UK benefits from government policies that require teachers to further their education, thereby, automatically increasing the demand for open learning. Harris argues that "every kind of openness associated with distance education seems to have its opposite side, a tendency to closure" (1987, p. 3 as cited in Tait, 1994, p. 30). In the UK case, increased demand is due to an imposed government directive, rather than learner interest. Another aspect of the tendency of institutions toward closure is their failure to recognize the individuality of learners. Harris identifies the need to see unique students rather than the "abstract" and "idealised" student (as cited by Tait, p. 31). This focus on the ideal, rather than the real, limits the capacity for understanding students. Tait explains: "the more the emphasis is on the idealised individual at an ideological level the less the actuality can be acknowledged" (p. 31). Similarly, Keddie (1980 as cited in Tait) argues for a more critical analysis of learners, one that acknowledges "how the individual relates to her or his place and time, rather than [promotes] the ideal notion of the individual who is appealed to in publicity" (Tait, p. 30). This argument is further emphasized by feminist scholars who also state the need for more consideration of the learner's unique characteristics. Tait indicates that "[the] feminist analysis establishes, and not only for women, that the location and identity of learners is all too often absent in the development of ODL" (p. 34).

> *As a full-time student, enrolled mostly in distance learning classes, yet living on campus, I was certainly not part of the majority. I sometimes felt my physical presence was not only not acknowledged but not wanted - that I was supposed to*

be a distance student so I should stay at a distance. I had the right to access all the services on campus, but at the same time, I was distanced by the delivery method that assumed I was not able to see the education building from my window. I was definitely not the intended audience for my program and I was expected to adapt to the way that was most convenient for the majority (or so I was told). When I asked too many questions about why courses were offered online I was told that most students wanted that. My presence wasn't enough to make any changes to the system.

Student Response to Distance Learning

In addition to the three previously mentioned stakeholders, distance learners themselves play an essential role in distance learning. While many choose to participate in distance learning because of its accessibility and flexibility, many would not, if other choices were available. Those who do not have a choice about their participation in distance learning are not always satisfied. For example, in a Hong Kong study, student ratings of one instructor decreased when her course was switched from a traditional lecture delivery to an interactive online program (Kekkonen-Moneta & Moneta, 2002). While the student ratings did increase somewhat with the second online offering of the course, they did not reach the same level as those of the original offering. In another example, Åkerlind and Trevitt (1999) describe students' stressful experiences with the use of educational technology. Hara and Kling (1999) comment on the limited research done on students' experiences with online learning in their study that examines how students can experience frustration with online courses. They conclude that the level of frustration of the students "inhibited educational opportunities."

In response to changing technology, like that used in distance learning, "enthusiastic innovators are sometimes taken by surprise when their praiseworthy attempts to enhance the quality of education for their students are met with complaints and resistance" (p. 97). Healy explains that, with time, the novelty factor associated with technology-based education wears off: "students' preference for learning from computers declined significantly, as did their impressions of how much they were learning [after three years of use]" (Healy, 1998, p. 63).

> *I was excited about my first online course. I had read about online courses. I had heard about distance learning from my father who coordinated teleconferencing and videoconferencing, and I had registered students in distance learning courses. I had a lot of background knowledge, but no experience. I was looking forward to this wonderful opportunity to learn online, to connect to students from across the country and to try out this new technology. This pattern repeated itself as I took other online courses. At the beginning of every course I felt anticipation about learning the content, meeting a new professor, and working with new students. But, every time the novelty wore off as technical problems, working in isolation and content-oriented instruction compounded my feelings of isolation.*

Even among those learners who choose to participate in distance learning, there are feelings of frustration and disillusionment. Bernstein (2002) describes her personal experience as an online learner:

> my experiences in fully online courses have left a lot to be desired. Although I was an A student from grade school through grad school, I dropped out of all three distance courses in which I was enrolled... It was simply too lonely for me....

Student advocacy groups have also spoken out against online learning; both the Canadian Federation of Students (CFS) and the Canadian Federation of Students-National Graduate Caucus (NGC) have published their concerns with the trend towards online learning (CFS, 2000; NGC, 2001). They express concern with the "ongoing erosion of quality" (CFS, p. 2), the increasing costs to students, and the commercialization and privatization of education. The NGC also expressed concern about implications for graduate students and teaching assistants: namely, those related to intellectual property, workload and "choice of technology" (p. 2). For example, faculty are losing control of the online courses they develop, which are being offered by less skilled instructors, thus reducing costs for the institution (Noble, 1998). In extreme cases, faculty members are being "automated" as their courses are moved online and are sometimes offered without any live faculty support (Noble, 1998). At the same time, for faculty teaching courses online more administrative time is required to keep up with traditional and online courses through e-mail, virtual and real office hours, and student meetings (Noble, 1998).

> *My graduate-level experience with online learning was sudden and unexpected. No one had informed me that the program in which I was enrolled was available entirely online. I felt betrayed by the people who had answered my questions by e-mail for the preceding twelve or more months as I made my plans to move across the country to pursue full-time studies as part of a community of graduate students. The promotional material about the program also omitted any information about course delivery, though that has now changed, in part, because of a formal request from the graduate students' union of the university, in response to my efforts to ensure other students don't find themselves in the same situation.*

After moving across the country, I met with a faculty member who identified the courses required in the first term of the master's degree. Two of these three courses were web-based. Not only did I have concerns about the unexpectedness of this announcement, but it increased my anxiety about taking graduate level courses. I had been a good student at the undergraduate level but I had no idea what to expect at the graduate level. Discovering I was going to have to tackle it by myself was not what I expected. It appeared that I was not going to be able to interact with other graduate students to share ideas and work together. What happened to my image of being part of a learning community? How would online learning affect the quality of my education?

Distance Learning and Pedagogical Issues

Distance learning is promoted as being as effective, and in some cases more effective, than traditional face-to-face learning. Some researchers and academics claim that distance learning is equivalent to traditional face-to-face learning and that it relies on sound pedagogical theory. On one hand, critics argue that high attrition rates and the continual focus on improving distance learning both indicate that distance learning is ineffective. Similarly, they argue that pedagogical theory is not always applied in distance learning contexts and, that when pedagogical theory is employed, it is based on traditional face-to-face settings without consideration of the contexts unique to distance learning. As Noble (2001) muses, if distance learning is so much better than traditional learning, why are post-secondary institutions still offering on-campus courses? Meanwhile, Healy contends there is not enough research to prove the effectiveness of technology-based education (1998, p. 61).

Before enrolling in my very first distance learning class, I had the idea it would take less of my time than a traditional class. I saw it as an easy way to do my prerequisite classes with minimal effort. I think I believed my online courses would be less demanding. Without a regularly scheduled class time, I believed I wouldn't need to set aside as much time. Eliminating three hours of scheduled class time = eliminating three hours of work. That math seems to work in theory, but not in practice. Or maybe I thought that online learning would be more efficient. From my experience, it seemed that a significant portion of undergraduate class time was set aside for teaching material in multiple ways and then reviewing material. So, I imagined that the online environment would be more efficient; the information would be concentrated without much extraneous repetition. I hoped to complete my prerequisites with a minimal time commitment and the distance learning option seemed to support my objectives of a quick learning opportunity that would allow me to move on to better things.

I'm not sure I consciously made the connection that my assumption about time implied that I also thought the courses would be easier, and perhaps even of lower quality, but I know I did make that connection subconsciously. I wonder if others make the same assumptions. Is distance learning perceived as taking less time or energy? Does it actually take less time? Do students devote sufficient time to their distance learning classes? How is the quality of the work time impacted by other distractions? How can you not have time for on-campus courses but still have time for distance learning? What are the relationships between distance learning, and time, and quality of education?

Is Distance Learning Effective?

Distance learning is promoted as being an effective means of education, equivalent to other means, as observed in the promotional materials of many institutions (see Campus Manitoba [CMB], n.d.; Memorial University of Newfoundland [MUN], 2001; University College of Cape Breton [UCCB], 2002; University of New Brunswick [UNB], n.d.). Moore (1998) supports this assertion. In fact, he states that distance learning is superior to on-campus education because, unlike other programs, distance learning programs have ensured that the "goals of designing and constructing specific learner-friendly conditions for study [have] been systematic, overt, conscious, and institutionalized" (p. 5). However, one has to ask which values are being "institutionalized" in this system and whether they are inclusive of diverse ways of knowing, constructions of knowledge and learners' needs.

High attrition rates.

One argument against the effectiveness of distance learning is the high attrition rates among distance learners. Numerous studies show that there are fewer successful students in distance learning courses than in face-to-face courses. Research shows attrition rates as high as 50% (Moore & Kearsley, 1996 as cited in Picciano, 2001, p. 94).

> *I wonder why anyone would enroll in a program that only half the students complete. If information on high attrition rates was more commonly available, institutions might have to work harder to attract students to distance learning. I would hesitate to register in a course, if I knew that most students dropped out before the end. I've used student ratings of classes to help me make decisions about what to take because I trust other students' reactions. In this case, I would*

see the attrition rate as a warning to not proceed.

For example, according to Chyung (2001) attrition rates at Boise State University in the Instructional and Performance Technology were 44% from the fall of 1989 to the fall of 1996 (p. 38). Noble (2001) concurs; he states that "Berkeley and Vanderbilt, have retention rates of well less than 50 percent" (p. 57) and the president of Onlinelearning.net, a partner in University of California, Los Angeles' (UCLA) distance learning program, confirms that "retention [of students] is a challenge" (John Kobara, 1998 as cited in Noble, p. 57). Other studies confirm that the attrition rates of online courses increase when students and instructors are separated (Holmberg, 1994; Institute for Higher Education Policy, 1999 both as cited in Osborn, 2001) and that attrition rates are higher in distance learning courses than in those offered in traditional classroom settings (Fenner, 1998; Kember, 1995; Verduin & Clark, 1991 all as cited in Chyung, 2001). The same trend occurs in most programs in developing countries where completion rates range from 1% to 80% (Perraton, 2000, p. 101). Teacher education programs have consistently higher completion rates than other programs, perhaps due to the strong connection between course completion and salary increase (Perraton, p. 194). Their success could also be due to financial support through professional development funds, technical support offered by school staff, and access to academic resources. In Canada, distance learning programs have completion rates ranging from 55% to 100%.[2]

Successful students in distance learning are lauded for their high levels of motivation, commitment to learning, and capacity to study in less than ideal conditions

[2] This information was collected from e-mail responses I sent to the universities listed on the Canadian Virtual University web site (CVU, 2003a). The sources for this information are B. Hughes, personal communication, June 20, 2003; A. Nightingale, personal communication, April 22, 2003; G. Perfect, personal communication, May 26, 2003

(Moore, 1998, p. 3). It should be noted that these are all necessary factors for success in distance learning, while they are not as essential in on-campus courses.

> *Before finishing my prerequisite courses, I certainly demonstrated that I could work in less than ideal conditions: at the kitchen table, in the cafeteria during my lunch break, late at night after a full day of work, at 8:30 am on Sundays with my breakfast in hand, when my arms ached from typing so much at work and at home, with library books from two different libraries in two different cities (getting to one involved a two-hour drive), connected to the Internet with a dial up modem, using an e-mail account with only 60 minutes of access each day... and the list goes on.... I could be the poster child for distance learning But would anyone really want to promote my experiences?*

Because tuition is collected at the beginning of the program, when students drop out after the period in which they can receive a full or partial tuition refund, the costs to the institution cease and the result may be a profit. While students are not likely to benefit from failing to complete a course, institutions benefit from students who do not complete programs and forfeit their tuition money. Historically, many correspondence programs relied on this drop out money for their profits; low completion rates resulted in higher profits (Noble, 2001, p. 8). Is it reasonable to question if this sort of this thing is still occurring today with distance learning?

> *Certainly paying up front motivated me to finish. It would have been easy enough to quit. The distance might have even made it easier because I wouldn't feel I was letting down my instructor or classmates. How could they feel disappointed; they didn't even know me? My name would disappear from the screen; that would be*

the only sign of my withdrawal. If it wasn't for my goal of getting into graduate school, and my financial commitment, I might not have completed the courses. I was taking prerequisites for a master's degree, part-time, while I was working full-time. Many other commitments were fighting for my time, but I knew I had to do well in these courses if I was to be accepted into my program. I often wondered, "What was I thinking!? Why am I trying to work and to be a student at the same time?" I'm sure my friends and family wondered too, as my life got busier and busier. I can see why some students might not finish their classes even if they started with the best of intentions.

Improving distance learning.

Much research literature focuses on making distance learning more learner-friendly, reducing attrition rates and improving learning conditions. For example, Moshinskie (2001) describes motivational strategies for use by online educators. Similarly, Osborn (2001) and Chyung (2001) identify characteristics that separate learners who are successful from those who are not. Other educators provide suggestions on how to increase student satisfaction and encourage completion. One suggestion is to phone students to establish personal contact with them (Chyung, 2001, p. 43; Gibson, 1998b, p. 73; Prendergast, 2002 as cited by Online Learning E-News, 2002). Prendergast also recommends having learners meet in person at the beginning of a course (Online Learning E-News). While these strategies may improve retention rates, they also confirm that the physical and psychological distance between learner and instructor poses a serious problem. While much of this material focuses on improving the distance learning environment, it does so without problematizing the issue. The ongoing research on

distance learning is of particular concern as students are paying tuition to take courses, "which are just experiments, and hence of unproven pedagogical value" (Noble, 1998).

Is Distance Learning Pedagogically-sound?

Post-secondary institutions use their overall academic achievements to promote their distance learning programs. Memorial University of Newfoundland (MUN), for example, uses its academic reputation to promote its distance learning programs: "[M.Ed. @ Home offers] university courses with all the perks.... Recognized and credible[:] Memorial University is nationally recognized for its courses and degree programs of the highest academic caliber" (n.d.). University of New Brunswick (UNB) also makes the same contention:

> the Open Access Learning Program (OALP) is a self-paced, guided independent study program, designed to offer UNB academic courses and services to individuals who wish to continue their formal education, but who are not currently served by conventional classroom-based courses. (n.d.)

Similarly, other providers of distance learning claim it is comparable to completing courses on campus: "Courses offered by distance learning are identical in every way to on-campus courses. The only difference is the means of delivery and evaluation. Courses are fully accredited, and if completed successfully, may be applied towards a degree" (CMB, n.d.). University College of Cape Breton also states their distance learning courses are comparable to traditional courses: "[Question] Are Distance Education Courses the same as on campus courses? [Answer] The same credit is awarded to UCCB courses regardless of how they are delivered" (2002).

Researchers support claims about the pedagogical value of distance learning by

stating it is as effective as face-to-face instruction. In one study in Hong Kong, learners, in a course where lectures were replaced by online learning modules, performed as well as learners in a traditional lecture course on factual learning questions and better than those in traditional lecture settings on applied-conceptual questions (Kekkonen-Moneta & Moneta, 2002). In another study, a meta-analysis of 120 studies, "the authors conclude that when class sizes are large, as in a first-year university course, computers can provide time savings for teachers, and motivational and academic gains for students in certain subjects" (Healy, 1998, p. 63). Other authors even state that distance learning is superior to face-to-face instruction. David Kember (1994) argues that the quality of instruction is more important than the medium used in instruction. He states that constructivist approaches can be effectively offered through prepackaged course material.

In contrast, other research evidence shows that distance learning is not as effective as traditional classroom learning. In a study of graduate students in a videoconference course, those students attending at the local site, where the instructor was present, experienced higher cognitive outcomes and a greater range of classroom activities compared to those students attending from remote sites (Knipe & Lee, 2002). Explanations of the difference in outcomes include factors such as the fact that those attending the local site had more opportunity to interact with the instructor during breaks and received more supervision and guidance during group activities.

> *My first experience with distance learning was in my third year of my BA in history. The majority of the students were at the host site, only two were at the remote site. The instructor was in the host site where I was, so from my perspective, it was much like a normal course but with supplemental technology - smart board, data*

projector, Internet connection. Sure, it took a little while to get used to seeing myself on the video screen and to remember to push the microphone button when I wanted to talk, but other than that, I didn't have an opinion about the distance learning experience. However, I could see that the distant students found it challenging. The students at the other site often had to take extra time to discuss logistical issues with the professor and to discuss the additional fees they were being charged and the services they should have been able to access. The only impact on my experience was that their discussion of logistics took away from class time on other topics. I think the remote site found it quite challenging to be a part of this course. They would miss out on discussions we had during breaks and they lacked the benefit of easy access to the instructor. However, at that time, I was too concerned with my courses and my academic commitments to wonder or worry about the delivery method and how it might affect other students.

A meta-analysis of 97 studies concluded that in comparisons of "CAI [computer-assisted instruction] with *the same amount of time spent with pencil, paper, and printed materials*, the traditional materials did as well or better. Students tutored by fellow classmates scored almost as well as those tutored by computers. We might expect that skilled teachers would produce even better results" (italics in original, Healy, 1998, p. 63). According to Brown and Liedholm (2002), online students studying microeconomics do "significantly worse on examinations than the live students" (as cited by TeleEducation NB, n.d.).

Depending on face-to-face teaching methods.

One possible reason for the ineffectiveness of distance learning is the reliance on

educational theory and instructional methods developed for the traditional face-to-face classroom setting. Traditional pedagogy continues to be applied in new distance learning situations. Despite the obvious and subtle differences between the classroom and the online environment, some instructors try to apply their classroom material directly to this new format, continuing to employ instructional methods based on lectures followed by assignments. The only change is that students now read the lectures rather than hear them. Other instructors "merely take PowerPoint slides, blindly convert them to HTML, and call it Web-based training" (Jackson, 2002).

> *I completed more than one course where I had to read "lectures" every week. Sometimes, I was sent cassette tapes and video cassettes to supplement written texts. The content of one of the videos was the professor speaking at a conference. Having the visual component did not add anything to the presentation. Overall, I can't remember any multimedia productions that worked. There were supposed to be online videos clips in one class but they didn't work. No one could access them, and I don't think the problem was ever resolved during the term. In some classes, I think that material from correspondence courses was simply pasted on to a web forum; there were no links, no use of hypertext to join ideas, and certainly no use of computer technology to enhance the material. But that might be better than having technology simply for the sake of having technology,such as video materials that repeat the content of the online lectures without providing visuals that explain the content.*

Some instructors rely on learning theories designed for the traditional classroom. Those who do adapt their course materials to the new medium find the process challenging. It

requires rethinking their relationship with the material and with the student, and developing new communication processes (Burge, Laroque, & Boak, 2000; Perrin, 2002).

One risk of relying on traditional pedagogical methods is that weaknesses in instruction are more apparent. Burge (1998) explains that: "communication technologies, in [her] experience, tend to amplify faculty teaching and learners' learning skills and weaknesses, especially in contexts where people cannot see each other" (p. 27). Quality of teaching is an even greater concern when sessional or temporary staff are hired to teach distance learning courses. The employment of untenured staff members is an increasing trend as institutions attempt to cut costs (Noble, 1998). Concerns may increase as distance learning, specifically online learning, becomes more automated. In the future, computer programs will be employed to automate course materials, requiring even less input from faculty members (Taylor, n.d., Noble, 1998). Perhaps educators need to employ face-to-face teaching techniques as they have proved to be the most effective; however, using them means there is no place for technology as Stoll (1996) explains: "What's most important in a classroom? A good teacher, interacting with motivated students. Anything that separates them - filmstrips, instructional videos, multimedia displays, e-mail, TV sets, interactive computers - is of questionable value" (as quoted in Healy, 1998, p. 92).

Contradicting pedagogical theory.

Not only does distance learning attempt to transpose theory from one medium to another, distance learning is not supported by pedagogical theory. Most pedagogical theories are based on relationships - between educator and learner, and between learners. First, as Gray (1999) states, there is a need for physical interaction between learners. He

wonders if distance learning may have "pedagogic deficiencies" (p. 124). Specifically, he asks:

> to what extent 'can love and belonging' be encouraged when a teacher cannot even be seen? [...] to what extent can [positive teacher-expectations] be transmitted electronically, since [...] the important element of nonverbal communication, by necessity, must be missing? (p. 124)

One of my most disturbing experiences in online learning occurred when I misread the due date for a final assignment. Towards the end of the course, while checking my course guide, I discovered my assignment was already late and I hadn't even finished writing it. I panicked. I didn't know what to do. First, I'm not usually someone who misreads dates or who hands in assignments late. Secondly, I had no idea how my professor would react, how understanding she would be. The course manual said that late assignments would not be accepted and I knew I would fail the course if I didn't submit the paper. I was home alone when I discovered my mistake, so I had no immediate support in dealing with the problem. By the time someone arrived home I was in tears and unsure of what to do next. I was sure my academic career was over; I wouldn't get into graduate school and I'd be stuck in a "hated" job forever. I finally calmed down enough to e-mail my professor. Knowing I would have to wait until the next morning for a response because of the time zone difference added to my stress. I also e-mailed the academic advisors to see if there was any way of making up my grade. The next morning I dreaded checking my e-mail because I feared the worst. Thankfully, my professor was understanding and assured me that I could submit

my paper a few days late. I offered to fax it to her as soon as I finished but she said it would be fine if I mailed it. Just to be on the safe side, I sent it in a two day envelope. I didn't want it delayed any more than it had to be. In the end, all was well, and I did pass the course. In addition, I realized how important my plans for graduate school were to me. I believe that had I known the professor through regular face-to-face contact, I would have been better able to deal with my mistake. I would have known what to expect as a response and the professor would have known I wasn't the type to submit things late.

Not only is a physical teacher-student relationship important but, as Noble asserts, "an interpersonal (not merely interactive) relationship between people - student and teacher (and student and student)" (2001, p. 2) is an essential part of the educational process. Without the development of relationships, the process of acquiring knowledge or skills is better described as training, As Noble describes, training is more impersonal: "training involves the honing of a person's mind so that his or her mind can be used for the purposes of someone other than that person" (p. 2), which has more commercial connotations. Thirdly, students in distance learning courses seek interpersonal interaction outside of the course setting in response to the lack of contact within distance learning.

I can think of many situations where I made connections outside online courses because there weren't any opportunities in the course setting. A first example comes from when I shared office space with three other students who were in one of my online courses. After discovering we were in the same online class, we decided to meet before each assignment to discuss it. This situation helped all of us by giving us a chance to ask questions, and discuss assignments and share

reactions to the course. These meetings provided face-to-face interaction and interpersonal contact. In a second situation, I met Andrea (a pseudonym) in one of my on-campus courses. In the following term, we were both registered in the same two online courses. We met most weeks for coffee to discuss both courses and our progress. In one online class, there were over twenty students so there was a lot of discussion online which made it hard to keep up with all the postings. In the other class, there were fewer than ten students and there was very little online discussion. Outside of the course, Andrea and I were able to find a balance of discussion that worked for us, providing the face-to-face contact and interaction that we lacked online. Through phone calls and meetings, as we worked on assignments, we developed a mutual support system for resources and encouragement.

Friends, family members and community members may be important supports of the learner in the absence of interaction with the instructor and classmates (Gibson, 1998a, pp. 119, 122). Research shows that students who are enrolled in "more credit hours and working fewer hours per week" are at greater risk of failing to complete distance learning course (Osborn, 2001, p. 48). Students enrolled in more courses and working fewer hours will be spending more time studying independently; therefore, they have fewer opportunities to interact around their course work. This finding suggests that exclusively interacting via computer media is an unsuccessful approach because students need a certain amount of personal social interaction with peers, coworkers or community members in order to succeed. Learners must maintain a balance between online learning and other life activities to ensure sufficient opportunity for consideration of new ideas

and opportunities for the exploration of new learning through interaction with others.

As students find the lack of interaction and physical contact inherent in online courses to be a challenge, so do instructors. Instructors are also faced with challenges in the role of distance educator. While working to develop environments conducive to building connection among students, instructors must carefully examine their own communication techniques. They must consider the roles of humour, silence and emotional expression in the online environment where traditional methods like facial cues and body language are invisible (Burge, Laroque, & Boak, 2000).

> *As an online writing tutor, I would always let students know that I was available by e-mail if they had any problems understanding any of my grammatical comments or other writing suggestions. During the eight months I spent tutoring online, I only remember one student actually asking for more information. I'm not sure how to interpret the lack of response from other students. I found online "silences" very hard to accept. I know that the students couldn't have understood everything I said because I often noticed problems recurring in future drafts. I don't know how students interpreted my questions. Do they think I am just trying to be conversational? Do they think I'll feel criticized if they don't understand? Are they feeling confused and uncertain about asking questions because, in their minds, I am an authority figure (they can't see that I'm just a student too)? Are they uncomfortable asking questions because they are shy? I worry that I may be writing in a style that makes students feel they can't or shouldn't ask questions. Am I somehow silencing them through something I say or do? Are they unsure how to phrase their questions? Maybe they lack the vocabulary to write about*

comma splices or transitional phrases. I have no way of knowing what they are thinking or feeling. When I am tutoring in person, teaching a class or speaking to a group, I have cues that help me gather information about whether I am making sense and I can see if there are questions. The lack of these cues makes interpreting silences online very frustrating. There is a risk of this kind of frustration increasing as universities recruit students around the world. The challenge of communicating online with learners with different linguistic traditions and in second languages will be even more difficult.

Does Distance Learning Provide Sufficient Support Services?

Post-secondary institutions offer many support services to assist students in achieving their academic goals. These services range from academic support provided by library staff to counselling for emotional difficulties, career decision making and study skills. Student services professionals have long recognized the link between orientation programs and student retention rates (Gardner & Hansen, 1993, p. 183). Students who receive information about expectations of a course or program and have access to services and strategies to support their participation are more likely to continue and to be successful (Fox, Zakely, Morris, & Jundt, 1993; Krallman & Holcomb, 1997). While orientation programs previously focused on full-time, traditional-aged students, programs are being expanded to meet the needs of mature students and part-time students. While orientation programs for distance learners are far from universal, some researchers and educators recognize the need for these services. For example, some institutions offer videotapes, print resources and telephone and e-mail contact with professionals to fulfill the roles of orientation programs, study skills training and advising and counselling

(Granger & Benke, 1998, p. 133). When support services are available, females are more likely than males to access the services offered (Thompson, 1998, p. 14; von Prümmer, 2000).

> *Because I worked in student services, I wondered about support materials available to distance students. I received information about resources for distance students, and I thought about requesting some, both out of professional curiosity, and with the idea that there is always something new I can learn. But then I thought, maybe the institution only has one copy and there is someone out there who needs it more than I do, "After all, I'm a "good student" so I shouldn't need any extra materials. And I've chosen to take this course independently so I have to do it on my own." Yet, now, I can imagine that the resources available aren't used to capacity because other students may feel like I do or they just get too busy to request the materials until their usefulness has passed or they may be completely unaware of their existence.*

Insufficient support services.

Distance learners who can not access support services offered by their post-secondary institution seek other resources. These learners often rely on local resources to support them in their studies. Librarians are one of the services often accessed locally; according to Gibson (1998a) they "continually emerge as nominees for sainthood by distance learners" (p. 122).

> *Another experience with distance learning came as I prepared for my master's degree program. I had to complete three prerequisites: a statistics course and two education courses. I started with a correspondence course in statistics. Because I*

am fairly comfortable with math and found much of the material vaguely familiar from my high school math course, I was able to complete the course almost entirely on my own. I only contacted the instructor to submit my assignments and to ask about the format and parameters of the exams. However, I wondered throughout the course how people who found math more challenging would tackle the material. I don't know what I would have done if I had been faced with problems in the course. I've received instructions over the phone for many reasons and find that this method is not the most effective for me. I think I would have sought help from the math instructors at the college where I worked or at one of the local high schools rather than accessing any help offered from a distance.

Conclusion

The agendas of government, the private sector and post-secondary institutions, who are all important stakeholders in distance learning, are often in conflict with the needs of the learner. Furthermore, while distance learning supporters state that distance learning is effective, research shows that distance learning programs have high student attrition rates, that they continue to be dependent on educational methods developed for the traditional, face-to-face classroom setting, and that they are perceived by governments, educational institutions and learners to be of lower quality than their face-to-face counterparts. As a result, learners' needs may be considered secondary to profits, and educational quality may be considered secondary to technological application. The next chapter will further examine the rhetoric of distance learning as inclusive and democratic, accessible and flexible, and cost effective.

Chapter 4: Distance Learning: Access and Inclusion Issues

Though there had been opportunities to research and write about distance learning academically in classes, there didn't seem to be a place for my own experiences. I detected a pervasive attitude in the literature and in the department that distance learning was an unquestionably positive experience. A critical approach to distance learning did not seem to fit in with the general attitude of the faculty, and pursuing an alternative viewpoint was too much of a risk within the parameters of most classes. It wasn't until I began to consider the role of the body and bodily knowledge that I recognized why I felt so dissatisfied with my experiences. My thesis topic developed out of a paper I wrote about the absence of bodies in the online environment and my experiences as a distance learner. Finding a theory that explained my experiences, prompted me to give them more credit and to consider their value. Combining my theoretical knowledge and my experiences seemed to be a way of exploring and understanding experiences.

Introduction

Distance learning is promoted as learning that can be accessed from anywhere, at any time by anyone. It is also presented as being a cost effective option for post-secondary institutions, which are being run more and more like businesses as they face reduced government funding and increased competition for students in the global marketplace. Business organizations are also recognizing the profitability of offering distance learning. Furthermore, researchers are seeking ways to improve distance learning, in particular, to make it more learner-friendly. This positive view of distance learning is

illustrated in both promotional materials and research texts.

> *I did not register in graduate level distance learning courses because of their accessibility from anywhere at any time. But, once I was enrolled, I took advantage of the flexibility. I was able to make two trips home during the term because, as long as I had Internet access, I could work from anywhere. I appreciated the opportunity to visit family and friends, even with the responsibilities of my course work constantly looming in the background. I did some work before my trips and I worked to catch up afterwards so I could enjoy my holidays. The flexibility allowed me to travel but it didn't reduce the amount of work or the fact that I was continually tied to my classes, even from across the country.*

Despite the repeated presentation of distance learning as an effective means of education, there is also another perspective on distance learning: the critical approach. Currently, there are a limited number of sources that provide a critical examination of distance and online learning. Perraton (2000) suggests that limited critique of distance learning may indicate its perceived lack of importance compared to more common, and more traditional, classroom delivery methods. Another reason for the lack of criticism is that governmental organizations, such as the European Commission, United Nations Educational, Scientific and Cultural Organization (UNESCO) and the World Bank, not only support distance learning, but have produced a wealth of supporting research. As Perraton describes, "governments have invested heavily in open and distance learning, and a new academic literature has grown up as a protective thicket around it" (2000, p. 9). This literature promotes new technology and software; extolls the benefits of distance

learning for instructors, learners and institutions; makes recommendations about policy and program development; and describes successful programs and partnerships (see Centre for International University Cooperation, n.d.; Commonwealth of Learning [COL], n.d.; European Distance Education Network [EDEN], n.d.; Global Knowledge Partnership, 2002).

One example of the critical approach is provided by Tait (1994) who concludes that "the age of innocence for Open and Distance Learning [is coming to] an end" (p. 27) as the number of critiques increases. Among distance learning critiques, the role of distance learning in developing countries is a common topic (see Arger, 1990; Perraton, 2000) though the same arguments are also seen in research from industrialized countries. Interestingly, early critiques of distance learning, usually as delivered through correspondence courses, present the same arguments as more current critiques of distance learning that uses Internet technology (Noble, 2001). The current critics of distance learning are not just researchers but also faculty members (Noble) and post-secondary students (Canadian Federation of Students [CFS], 2000; CFS-National Graduate Caucus [NGC], 2001; Noble).

Distance Learning: Inclusive and Democratic?

The research and promotional materials presented by researchers and post-secondary institutions promote distance learning as an inclusive and democratic form of education. First, they argue that it allows disadvantaged groups to participate in learning. On the other hand, critics argue that barriers prevent the full participation of disadvantaged groups, that the Internet, an essential component of online learning, is not equally accessible to all individuals, and that the distance learning system is inherently

biased. Secondly, promoters of distance learning state the advantages of an appearance-free environment. In response, critics show how social relationships and communication patterns online are similar to those in other settings.

The Rhetoric Promotes Distance Learning for Disadvantaged Groups

Distance learning is promoted as a form of education that is equally accessible to all learners. It is important to note that equal access does not necessarily mean that all groups are able to benefit from the educational opportunities provided. Equal access fails to acknowledge the unique needs of certain groups who may be better served through equitable access which provides additional support systems, where necessary. Distance learning programs seek to draw learners from new markets; in particular, they promote their services to those who can not or choose not to access on-campus programs, such as women, part-time students, students without the necessary admission requirements, students of colour, students from lower socioeconomic classes and students with disabilities. One target audience for distance learning programs is women in the home, those caring for small children or raising families (von Prümmer, 2000, p. 3). The targeting of women for distance learning is not a recent phenomenon (Oudshoorn, 1988). Part-time students are another target audience. They are only able to study part-time because of other commitments, like full-time employment or family commitments (Open Learning Agency of British Columbia, 1994, p. 6). In many cases, these learners are upgrading skills, improving their employability or seeking professional advancement (Open Learning Agency of British Columbia, p. 6). A third potential audience, especially in programs with flexible entrance requirements, is students who do not meet the academic admission requirements to other programs (CVU, 2002). Another group of

students who rely on distance learning programs are those who cannot access on-campus programs. In developing countries, these students may be unable to attend on-campus programs due to social class or economic status (Perraton, 2000, pp. 180-181). Similarly, in industrialized countries, students with disabilities, may choose to access distance learning programs because they cannot attend on campus (Open Learning Agency of British Columbia, pp. 2, 6).

Barriers to Participation

While distance learning is promoted as a viable means of participating in education for disadvantaged students, in reality, its policies do not serve all of its learners equally. In the case of women working in the home, participating in distance learning, rather than serving as a way of expanding their horizons, limits them by keeping them isolated at home (Faith, 1988; Spigel, 1992 as cited in Shade, 2002, p. 88). Arger (1990) echoes women's dissatisfaction with distance learning and its failure to meet the expectation of equality. Similarly, Giddens (1991) states that while distance learning "[holds] out the possibility of emancipation, modern institutions create mechanisms of suppression, rather than actualisation of self" (p. 6 as cited in Tait, 1994, p. 34).

> *I know that I found it hard to work full-time, take two distance learning courses and still find time for personal commitments. These factors suggest that those individuals who are combining work, family and school are at a disadvantage. Thompson (1998) says that more distance learners are occupying multiple social roles as they work full-time and have families. However, she also states that women who work outside the home are less successful in distance learning situations. The promotion of distance learning to individuals who are occupying*

multiple roles may be encouraging groups of students to participate in a learning environment that is not conducive to their success. The inclusion of these learners is based more on financial benefits to the institution than on personal benefits to the students.

Secondly, in the case of disadvantaged groups of learners such as women, part-time students, students from different racial groups and social class, and students with disabilities, distance learning is perceived as the only means of education when on-campus courses are not accessible due to institutional and physical barriers. These learners, when excluded from other forms of education, accept distance learning, but only as a less appealing option (Perraton, 2000, pp. 180-181).

I certainly saw distance learning as a less appealing option after I started my full-time studies. Every term, I made sure to register for one course on campus. This approach really limited my choice of elective courses; my electives were the courses offered on campus, regardless of topic. I know other part-time students who also selected their courses based on what was being offered on campus; they also saw distance learning as less appealing. I guess being part-time students gave them more flexibility to plan their schedules over multiple terms. As a full-time student, I completed all of my courses in three semesters.

However, acceptance of distance learning allows governments and institutions to continue to ignore barriers that discourage, and even prevent, disadvantaged learners from participating in on-campus programs (Perraton, p. 188). Upon graduation, these learners are further disadvantaged by the second-rate education they have received and by the stigma associated with their inferior training. Geographically, distance learning is more

prevalent in developing countries and in rural areas of industrialized countries than it is in industrialized urban centres and, as Perraton states, in developing countries it is the disadvantaged groups who rely on distance learning: "it is not surprising that most students at [the] tertiary level come from socially, educationally or geographically disadvantaged groups: more favoured students have pursued a conventional education" (p. 181). There is clearly a parallel between disadvantaged students who rely on distance learning when on-campus courses are not accessible and disadvantaged countries who rely more on distance learning than industrialized countries.

The Myth of the Great Equalizer

The popular myth that the Internet is a "Great Equalizer" (Wolf, 1998) allowing all people equal access to the wealth of information available online is a gross misconception. Wolf's research "[describes] the typical Internet user as overwhelmingly white, male, and well educated, with a higher than average income in a white-collar professional career" (p. 17). Similarly, Gray (1999) states that the "vast majority of Internet users are well educated, young, white males in first world countries" (p. 123). Both of these descriptions obviously exclude approximately half of the population of the first world countries, specifically women, as well as persons of different race, social classes, educational levels, and abilities. In the case of women, current estimates of female use of the Internet range from 20 percent to 43 percent (Wolf). In Canada, overall, men form the majority of Internet users (56%) compared to women (45%) (Reddick, 2000 as cited by Shade, 2002, p. 76). Increased access by men is also confirmed by other sources (see CyberAtlas staff 2002; Pastore, 2001). Many theories are advanced for the gender inequalities that persist on-line, including different communication styles (Crowston &

Kammerer, 1998; Wakeford, 1999), different conceptions of what counts as knowledge (Spender, 1995), an environment which is hostile towards women (Wolf; Wakeford; Shade, 2002, p. 80), lack of time due to work and family responsibilities (Wolf), and the financial costs of setting up and maintaining Internet access (Wolf).

> *I wouldn't say I feel excluded from the Internet but I do find it a harsh environment. I would rather get books from the library where I can talk with the reference librarian when I need help or suggestions. That setting seems more conducive to research. It is usually quiet, unlike online where flashing advertisements are distracting. Doing research online, I am faced with so much information that I can easily lose track of my goal, head off in another direction or simply become overwhelmed. The library is more orderly, something I value when researching. Mind you, I do use the Internet to find information when it is more convenient than going to the library.*

Biased Education Systems

Once students are enrolled in distance learning courses, the inequality continues. Despite the appearance of equality within the distance learning setting, hegemonic structures continue to privilege some individuals over others. The persistent presentation of what amounts to a male-biased educational material as an equitable educational system fails to recognize the diversity of its learners (Faith, 1988). Bramble (1999) makes a similar argument about the academic community's failure to recognize the needs of learners from different cultural backgrounds.

First, despite promoting its services as being appropriate for all students, this male-biased system continues to be out of touch with its students who are, according to

research, primarily female (Thompson, 1998). Thompson, based on research from different countries, institutions and programs, profiles the distance learner: "(1) older than the typical undergraduate, (2) female, (3) likely to be employed full time, and (4) married" (1998, p. 13). At the same time, she notes that it is important to recognize that each learner is unique and there is much diversity within any group of distance learners. But this leaves the question of who is the typical successful student, the one who completes the course and receives a passing grade.

> *Where do I fit into this profile? Obviously, Thompson is referring to undergraduate-level distance learning students, so the first characteristic doesn't apply. In terms of age, I am younger than many students in the master's degree program. It requires two years of work experience as an admission requirement, but I had only finished my undergraduate degree 1.5 years before starting. The rest of my experience occurred when I was a student. For the second criteria, I am female, though I am not sure that female students actually formed the majority within my program. I can't remember but I know that in some of my classes, there were only a few women. Thirdly, I am a full-time student, only employed part-time on campus. Again, I am in the minority. Most students in my program seem to be working full-time or else they have a semester off for educational leave. Finally, I am not married nor do I have a family, which many other students seemed to have. Within this program, I feel I am the abnormality rather than part of the majority. The target audience is full-time professionals seeking to upgrade their skills through part-time study. Most are established in their careers and families.*

Similarly, Tait explains, "an educational methodology which does not recognize the

situation of its learners denies and diminishes them, a risk in particular when large scale ODL systems do not have adequate interactive student support" (1994, p. 34). While female students form the majority of distance learning students, regardless of delivery method, the typical online student continues to be profiled as the primary Internet user: the white male. As von Prümmer states, the male student continues to be seen as the norm: "the persisting androcentrism, which either ignores [...] differences or sets the male experience as the norm to which women have to adapt, limits the benefits which women can derive from the educational opportunities offered through open and distance learning" (2000, p. 47).

Secondly, distance learning excludes some learners based on cultural characteristics. Anderson (1988 as cited by Sanchez & Gunawardena, 1998, p. 53) explains that the "Euro-American style" of learning used primarily by men is favoured in post-secondary situations. This approach focuses on "field independent and analytic thinking with limited affective thinking" (Sanchez & Gunawardena, 1998, p. 53). Cheng (1998) echoes the disadvantaging of some groups, with specific reference to Asian students. The Asian education system teaches its students not to express themselves directly, but instead, to consider ideas in their heads and to communicate those ideas only when necessary. This thinking strategy would result in little participation in a distance delivery mode.

Next, many distance learning programs rely on mentalist and behaviourist principles which value the knowledge of the mind over that of the body. The lack of a physical presence forces learners to participate from a mental perspective, devaluing knowledge acquired through their bodies, stored in their bodies and expressed on their

bodies, and reinforcing the damaging mind/body split. As Healy explains, "a relatively new field of neurophysiology elaborates on the need for body movement (and I don't mean pushing the mouse or the touch screen) to build different forms of intelligence" (1998, p. 122). (See chapters five and six for further discussion of the body in learning and the body online).

> *Early on in my graduate studies, I'm not sure I would have identified the absence of the body as the reason for my dissatisfaction. I did know that something was missing and that interacting with other learners was important to me. I also knew that I had things to say about my experiences that were hard to describe in writing, and too personal to post on a message forum. I felt that a part of me could not be expressed because I was not willing to take the risk of rejection, or even worse, having my ideas ignored. I decided it was better to communicate information and ideas, which were safer.*

Finally, the learning styles most valued in distance learning are those associated with male learners. According to von Prümmer (2000), who intentionally uses the male pronoun to describe the distance learner,

> the German DE system caters to the 'autonomous' and 'independent' learner who more or less happily studies on his own, working his way through the chosen material provided by the university. Ideally, this student has *chosen* to study at a distance and does not want to be bothered with personal contacts and demands for attendance or interaction. (p. 45)

This type of behaviour suggests a trend towards isolationism and interaction with objects rather than people. Åkerlind & Trevitt (1999) echo von Prümmer's comments: "with

computer-facilitated learning in particular, increased independence on the part of the student is often regarded as either a central goal or a desirable side benefit of the innovation" (p. 96).

> *The isolating nature of full-time online learning was hard to overcome. I had just moved across the country and I knew only a few people. I lived in a student residence on campus, but most other students in the building were away during the day because of their academic commitments. I did sometimes work in the education building's graduate office but that environment was better for social interaction than for academic work. It became a place to go when I needed a break from my work. There I could find someone to talk with about upcoming deadlines, the frustrations of using technology, advice about courses, and suggestion about resources. Unfortunately, there were only a few students from my program in my situation - full-time and on campus - and they were in the graduate office to work rather than to socialize. As the term progressed, and the weather worsened, and my workload increased, I spent less time there and felt further isolated.*

As the traditional hegemonic, male power structure of the academy is faced with new ideas and a more diverse population of learners, maintaining distance between learners can be interpreted as a strategy for reducing dissent and maintaining control. Not only are distant students often more focused around their home community where they work and live, they are also distanced from the events of the university campus and may not be aware of issues.

> *I noticed how hard it was to get distance learners involved in campus issues when*

I was involved in graduate student politics. As issues of concern, like increases in fees were discussed, I would post information to the graduate student listserv. However, I rarely got any response except from students wishing to remove themselves from the listserv. Even when I requested comments to present to the faculty on behalf of students, the number of responses was small though all who responded expressed concerns about the program. Maybe there needs to be stronger leadership among distance students if they wish to bring about change, and someone has to take the initiative for organizing students when there is no elected students' organization to accept that responsibility.

The Rhetoric Promotes an Appearance-free Environment

Some educators argue that the appearance-free environment of distance reduces stereotyping and permits 'othered' groups to participate more comfortably. As Spender (1995) describes, the on-line environment alleviates some problems of the school classroom including boys getting more attention than girls and the silence of students who feel shy or uncomfortable speaking up. Similarly, online environments eliminate visual cultural markers by which people are judged. She believes this inclusion will lead to girls feeling more comfortable expressing themselves; she goes so far as to state that "there's nothing to stop the girls from posting as many messages as the boys" (p. 143). Willson (1997) also argues that the Internet is a site for liberty, equality and fraternity. Equality is guaranteed by removing visible signs of difference: "any basis for enacting embodied discrimination is removed, freeing access to participation and granting each participant equal status within the network" (p. 149).

Replicated Communication Patterns

Despite this optimistic view of the Internet, similar to the myth of the great equalizer, the reality of the Internet is not ideal; in reality, it perpetuates the communication and social patterns of traditional, face-to-face learning. First, the levels of participation in on-line discussions and Internet forums indicate that many women feel uncomfortable expressing themselves. In addition to the studies showing that women feel threatened by the dominant masculine forms of communication on-line (Wakeford, 1999), research indicates that those students who were unlikely to participate in discussions feel even less motivation to participate in on-line settings (Mason, 1991 as cited in Light & Light, 1999). In addition, the perceived anonymity and equality of the on-line communication is deceiving because different communication styles often make it possible to distinguish between male and female participants (Herring, 1994 as cited in Wolf, 1998). Similarly, only visual cultural markers are made invisible online; other methods of distinguishing class, race and gender persist.

> *Well, sometimes distinguishing characteristic are complicated. I've gone through online courses with students from other cultures and I've not been able to tell if they were men or women. Their names were unfamiliar to me and I had no visual cues to help me. I've remained curious about these people and backgrounds, which I assume are different from mine, because we've never met. In other cases, cultural markers have been inaccurate. I was in a number of classes with a student who came from another country, and computer technology was new to him. From working in face-to-face classes with him, I knew him as a very articulate individual. But online, his lack of technical skills made him appear much less*

confident and he communicated far less. From his online postings, he appeared to be unfamiliar with writing conventions so he would always write one very long paragraph. Without meeting him, other students could easily make inaccurate judgments about him.

Secondly, in on-line discussions, participants are expected to adhere to the rules of netiquette. In order for a discussion to proceed, the participation of multiple members is required and those who monopolize are as much a problem as those who do not participate (Norman, 1999; Richard, n.d.). Similarly, the facilitator's tolerance for a student demanding excessive time and attention should not be imagined to be any different from the degree of tolerance in a face-to-face setting.

Finally, usage patterns and participation rates of students in distance learning programs do not support the theory that women can, and will participate, in this type of learning environment. Thompson (1998) looks at a number of sources which indicate that women's enrollment in distance learning varies from country to country. She reports that in Canada, the United States, New Zealand, and Israel the majority of students are female; in Britain enrollment numbers for men and women are equal; and in Germany, India and the Netherlands, male students are the majority. However, statistics for women's levels of enrollment in distance learning classes in Germany are not significantly higher from their enrollment in traditional classes as would be expected. In fact, in some cases, women's enrollment in distance learning programs is lower than their enrollment in face-to-face offerings (von Prümmer, 2000).

Distance Learning: Accessible and Flexible?

Researcher and educators alike, promote distance learning as accessible from

anywhere at any time. This accessibility gives the learner more flexibility in choosing and organizing learning activities. However, the digital divide shows that not all learners can access online learning programs, nor are they accessible from everywhere.

> *I wonder about the argument that distance learning is a good approach for learners who can't fit traditional classes into their schedules. How can someone have time for a distance learning class but not for a traditional class? I find the scheduled class time helps me to stay on task, to schedule my time and to keep the right pace for my classes. In online classes I am more likely to procrastinate or to leave work to the last minute. With online classes, my academic work was a second priority; it had to fit in to my schedule between my other (more important) commitments. I had to ensure I scheduled time to complete my work because there was no regular class time set aside each week for that purpose. With traditional classes, I had a regularly scheduled commitment. Attending my class was a priority and other (less important) activities had to fit around my academic pursuits.*

The Rhetoric of Accessible and Flexible Education

Accessibility and flexibility for the user are among the key arguments used in promoting distance learning. Students in rural areas and communities without post-secondary institutions can participate in educational activities that would otherwise be unavailable (Open Learning Agency of British Columbia, 1994, p. 2; Perraton, 2000, pp. 180-181). Learners can also control their study schedule to reduce conflicts with family and work responsibilities (Bradley, 1998; Memorial University of Newfoundland [MUN], 2001).

I wonder how the trend towards more distance students relying on online learning when there are academic centers in close proximity (see Thompson, 1998) affects their academic programs. Are more students attending part-time, therefore stretching their academic careers over a longer period of time? When this stretching occurs, does the quality of education change as the blend of academic and nonacademic learning changes? Maybe it is better because learners have more time for reflecting on the learning from their experiences at school, work, home and in the community resulting in deeper more impactful learning. On the other hand, learning may become more compartmentalized as each part of the learner's life is seen as an independent part.

Vojtek and O'Brien Vojtek (1997) describe distance learning, in particular online learning, as having the possibility to "emancipate time" for busy teachers. Furthermore, people who travel, for work or for pleasure, can pursue their educational goals without being restricted to one place (Canadian Virtual University [CVU], 2002). In fact, these groups of learners can be served simultaneously by distance learning programs (Dodds et al., 1972, p. 10 as cited in Perraton, pp. 1-2).

To further facilitate accessibility, some institutions have clear policies to ensure their courses are available to all learners. Elizabeth Burge describes how one institution is restricting its use of Internet technology because not all learners have access to this technology. This decision is based on the institution's "policy of nondiscrimination based on technology access" (1998, p. 27).

What a good idea! Maybe something should also be done for students living in different time zones.... One day, I had to rearrange my work schedule to take a late

lunch so I could log on to a live online discussion during my lunch break. With the time difference, it was already evening at the host site. I made the arrangements because this online chat was the only opportunity for synchronous discussion with the professor and other students. Obviously the time wasn't convenient for everyone because only a handful of students logged on while I was there, but I think the professor was going to be available for a few hours. Maybe more students would sign on later. I didn't stay online very long because I had to eat my lunch and get back to work. In my other class that term, I missed both teleconference sessions because they were held when I was at work. Again, the time zones caused a problem. In this case, I was able to order a cassette recording of the discussions. (There was an extra fee though it was probably less than the long distance charges I would have paid for the three-hour phone call to participate in the teleconference.) I think I only listened to one side of the first tape. It was so boring! Without any visual stimulation and without my participation there was nothing to keep me interested. Once I realized that there wasn't much I was going to get from it, I turned the tape off and put my time to better use. I didn't even listen to the second tape, a review for the final, because it arrived after I wrote the exam. In both cases, being in a different time zone, I was left out of course activities, just as much as I would have been without the necessary technology.

The Digital Divide

Online learning, in particular, requires the use of specific equipment, programs and Internet resources as well as specialized skills. Despite Burge's (1998) claim of

nondiscrimination, many institutions do not yet "provide alternatives and 'work-arounds'" (Anderson, 2001, p. 31) for students without the equipment and skills for success in distance learning. Overall, Anderson states that there is a "hidden curriculum" in distance learning, an implicit or hidden agenda that presupposes learners have certain skills. First, he acknowledges the existence of a "digital divide" which separates those who have high-speed Internet access, the equipment necessary to view multimedia productions and the skills to use the computer equipment and software, from those who do not (p. 30). Trend clearly illustrates the depth and breadth of the divide:

> During the last decade the number of hosts (computers with direct access to the Internet) rose to 36 million, as the number of Internet users worldwide grew to 200 million. As dramatic as this sounds, it is important to recognize that Internet users represent less than four percent of the world's 6 billion people.... Reports indicate that households with incomes under $25,000 were 20 times less likely to have Internet access than those with higher incomes, and people with little education were 25 percent less likely to be netizens than college graduates. (2001, p. 124)

Other sources confirm, in the United States, the following characteristics for the digital divide: "different levels of income and education, different racial and ethnic groups, old and young, single and dual-parent families, and those with and without disabilities" (United States of America, Department of Commerce, 2000, p. xvi). Canadian statistics confirm that age, educational level, income, gender and language of communication all influence Internet access (Pastore, 2001; Statistics Canada, 2003). At an international level, 580 million people had Internet access from a home PC at the end of the year 2002

(Nielsen/Netratings, 2003), about nine percent of the world's population.[3] The previous discussion of the myth of the Internet as an equalizer raises similar issues of access and skill levels.

Secondly, as Anderson identifies, some learners are restricted from distance learning because of their lack of experience and confidence in using technology (p. 30). This lack of experience with technology and confidence in using technology is a particular concern for female students (Spender, 1995; Taylor, Kramarae, & Ebben, 1993 as cited in Burge, 1998, p. 34). Ursula Franklin (1997) encourages the questioning of technology's role. She states users need to:

> Be mindful of how the tool shapes the task. And that you only find this out when you learn about the tool. Learn what is in this Internet. But then keep your head clear and go back to your goals. ... When is that moment when the intangibles of the potluck far outweigh the elegance of a message on the Internet? (pp. 11-12 as cited in Burge, 1998, p. 35)

> *I needed to take two education prerequisites to the M.Ed. program, after completing a statistics course by distance learning. Fortunately, both were offered through distance learning. They both seemed to be popular courses since I had to be placed on a waiting list to access one of the courses. The first course was offered online with WebCT software. A new experience for me. I had used the Internet for e-mail and research before but not for an online course. I awaited the course with both excitement and apprehension. I wasn't sure what to expect - would this be like the mailing lists I had joined or would it use all of the*

[3] The Population Reference Bureau (2002) indicates the world's population in 2002 was 6,214,891,000.

technological tools I had only heard about? I discovered that, thanks to my previous computer experience, WebCT was manageable. It involved clicking on links. I took some time to explore the features of the program - the interface was quite easy to use, the material seemed manageable. But as I continued my studies online, I met many students who did not have the same technological skills. I recall, especially, the international students who faced the challenges of the Canadian educational system and the English language, in combination with the online learning environment, and of the students trying to learn new technology while working full time and raising a family. I think I had it easy.

Anderson identifies independent study skills as another component of the hidden curriculum (p. 31). Other sources confirm that there are unique skills required for success in distance learning that learners may not have acquired from other situations (Gibson, 1998, p. 72). Women, in particular, feel pressured for time when studying; therefore, they require efficient study skills to be successful. Burge (1998) states that the format of distance learning course may "drive [women] into inappropriate academic street-smarts (e.g., 'anything to get my degree')" (p. 32).

The skills I needed to succeed in my university education ranged from technical skills like writing, researching and organizing, to social skills like participating in class discussions, being polite and attentive, and being respectful of other perspectives. Online, it was my technical skills that were essential. Time management, working independently and writing were the next most important. Social skills were secondary. Of course, I had to participate in class discussions, but being polite and attentive wasn't really necessary. As long as my postings

were appropriate, there was no need to express my personal feelings. As for being respectful, there were only a few cases where conflicting points of view were presented, and I felt the need to be particularly sensitive. In most courses, there was hardly any controversy. The biggest issue I can remember from one online course was a discussion about students with food allergies - should certain foods, like peanuts, be banned from schools? I can't remember how it related to any course content but it did cause emotional responses, and some people probably felt hurt by comments posted because their children or students had allergies. They may have felt that the safety of these children was being ignored.

A fourth aspect of the hidden curriculum is overcoming distance which requires "both teachers and students to make their knowledge more explicitly public" (p. 33). Yet another aspect of the hidden curriculum involves students working with fewer support services (p. 33). Again, learners are forced to make do with a second class education system.

Making experience "explicitly public" is hard. I try to integrate my experiences and learning, so I don't see events as independent. For example, my work experience is a part of who I am as a student and I cannot separate the two. Because everything is so closely linked, it is hard to describe the connections. Without seeing the person I am communicating with, it is so much harder to judge whether I've communicated effectively. When I have to type out my ideas in an organized fashion, I am more likely to write concisely and selectively. Many things I may tell people if I speak with them are condensed and they lose some of their detail in the process of writing.

Distance Learners in the Dorm

While accessibility is used to attract students from a distance, a large portion of distance learning students are living on campus or nearby. In these situations, distance does not actually refer to a geographical distance; it only refers to the absence of contact between learners and instructors, in a situation where they could actually meet face-to-face. Thompson (1998) describes a trend of more students relying on distance learning, even when they live in close proximity to post-secondary institutions. Noble describes students who live in very close proximity to post-secondary institutions, in fact they live right on campus: "at the universities of Colorado, Washington, and Arizona the great majority of alleged 'distance-learning' customers 'are in the dorms'" (2001, p. 57). Similarly, Wallace (personal communication, June 2003) states that on-campus students now form a second major group of distance learners in Canada, while the other major group is comprised of part-time adult students. One explanation for the increasing number of students in online learning is that it provides flexibility, even when distance is not a concern. Another explanation is that online learning is the only option for students wishing to complete certain courses.

Distance Learning: Cost Effective?

Cost Efficiency and the Bottom Line

Distance learning is presented, in some instances, as a cost effective option for training large groups. For example, in developing countries, distance learning is a means of providing low cost education to a wide population with the hopes of increasing economic prosperity (Perraton, 2000), with institutions benefiting from reduced costs for infrastructure, namely, buildings and classrooms, and administration (Dodds et al., 1972,

p. 10 as cited in Perraton, p. 1). Similarly, in the business world, distance learning is used for professional development activities. It is seen as an efficient approach because it can target learners' needs with just-in-time training with less loss of work time (Dodds et al., 1972, p. 10 as cited in Perraton, p. 1; Tsui & Yue, 2000).

> *When I enrolled for my prerequisite courses, I wanted efficiency. I needed to finish the courses to start my degree in the fall. I wanted to acquire as much information as efficiently as possible and as easily as I could so I would have the academic requirements for admission to a master's degree. I didn't want to waste time with extras that would slow down the process. I know I can be organized and efficient to get things done. Working alone, I thought I would be able to overcome the inherent waste of time I had previously experienced in traditional classes. My approach was focused on the academics and the mind. I wanted information, not connections. So, from my current perspective, it is very interesting to see how I wanted the master's degree program to provide all the qualities that I hoped to avoid in my prerequisite courses.*

Cheaper and Lower Quality Education

The lower cost of distance learning allows governments to present the appearance of providing education without any actual increase in spending on education. Based on policy statements from developing countries, Perraton determines that "despite all the concerns about [distance education's] quality, higher education is expanding in response to demand and that distance education offers a way of meeting that demand without a commensurate increase in the budget" (2000, p. 183).

Higher Costs to Students

Lower costs for institutions and government are not always passed on to students. In some developing countries, the perception is that students enrolled in distance learning should be more responsible for their own expenses (Perraton, 2000, p. 185). More specifically, governments in developing countries fund distance students at a lower rate than traditional students: "with the exception of Mexico, governments are, at most, willing to pay a smaller proportion of a lower unit cost for distance education than for regular education" (Perraton, p. 187). Similarly, in industrialized countries, distance learning students face more challenges in financing their education. As Gibson (1998a) explains, distance learners are disadvantaged when accessing student aid, thus they face financial challenges beyond those of on-campus students (p. 120). At MUN, students pay their own costs for mailing, Internet access, and long-distance phone charges for teleconferences, as well as an administrative fee. The administrative fee has recently increased to $17/credit hour or $51/three credit hour course for students in the province and $34/credit hour or $102/three credit hour course for students outside the province and international students (MUN, 2003a). Recently, distance learning students who are also enrolled in courses on campus at MUN have been asked to pick up their materials rather than having them mailed by the university (MUN, 2001).

> *In my case, being a distance student off campus was probably more expensive than being a distance student on campus. When I was off campus, I didn't have access to used books so I had to buy new ones. I also spent more on postage, first, to order teleconference sessions that I missed; second, to mail the cassette tapes back at the end of the term; and, then, to submit my assignments by mail. I paid the*

extra fee for two day delivery so I could track my assignments after I mailed them to ensure they arrived. Though I never needed to make phone calls to my professors, I did have to pay long distance fees to contact the university. These costs were small but they added up over time.

As for using the library, I relied on the local college library, where I was employed, which saved me money. I also made trips to a university library to access resources as an alumnus. In this case the costs included driving, parking and time. I did not use the library services from the host university for off-campus students because I was not aware of the types of services that were available and the other resources were more convenient.

Of course, on top of all these extra costs, I also had to have access to a computer, a printer, and hardware and software to connect to the Internet, and for safety reasons, I wanted a virus checking program because a lot of information was sent in attachments or had to be downloaded. I was lucky that I worked at a college that offered invigilation services in connection with the host institution Otherwise I would have had to pay to have my exams invigilated, too.

According to the National Centre for Education Statistics [NCES], as many as one-third of American institutions charged distance learning students additional fees some or all of the time (Lewis, Snow, Farris, Levin, & Greene, 1999, p. 45). In fact, many distance learning programs, in both developing and industrialized countries, intend to generate profits (Noble, 2001; Perraton, p. 186-187). "In short, students are expected to pay more, and governments are willing to pay less, for an education that both will regard as inferior" (Perraton, p. 188).

Conclusion

Despite the arguments of researchers and educators that distance learning opportunities are available from anywhere, at any time, for anyone, there are clearly more complex issues to consider. Distance learning is not as inclusive as promoters would have one believe; it disadvantages some groups by excluding them from traditional educational settings. Nor is distance learning as accessible as it appears; many potential learners are excluded because they can not access the computer resources due to lack of equipment, lack of skills or lack of confidence. The next chapter will further examine the pedagogical theories related to distance learning and how it is more accessible to some learners than others.

Chapter 5: Learning Theory

Writing this thesis gave me the opportunity to really explore new ideas. I felt challenged in ways I hadn't felt before as I tried to understand new concepts both abstractly and experientially. The theoretical content I read clarified things I had felt but that I had been unable to articulate. I became caught up in new ideas and excited by new possibilities. Reading one article would lead me to others; the process could have continued endlessly. It will certainly continue beyond the work of this thesis. As I explored new ideas, I related them to my experiences as a learner and as a person. I wanted to better understand the roles of learning and experience and how they were interrelated.

Introduction

While rhetoric suggests how distance learning is, learning theory influences how it actually is. Selecting a learning theory is a decision that influences how students will be positioned in the educational setting. This decision will also affect whether or not some students will be privileged, and which students will be privileged. This chapter will begin by exploring learning theories. First, it will examine behaviourism and mentalism, which are traditional educational theories that replicate the mind/body split, valuing one kind of knowledge over another. Then, it will consider constructivism and social constructionism, which acknowledge the role of experience and social interaction in learning. Next, recommendations for applying these more inclusive theories in the online environment are compared to the practice of relying on traditional theories. Finally, learning styles that replicate the mind/body split and gender divisions are examined.

Behaviourism and Mentalism

Two important learning theories of the last century are behaviourism and mentalism. Both learning theories separate the mind and the body in the learning process. Behaviourism focuses on observable behaviour that is the direct result of a stimulus. Based on the work of B. F. Skinner, behaviourism relies on positive and negative reinforcement to encourage or discourage certain behaviours (*Operant Conditioning*, n.d.). By only relying on the observable behaviour, this theory ignores mental processes that may influence learners. In doing so, it replicates the mind/body split. Though it observes behaviour which sometimes includes the body, it still does not acknowledge the role of the body in learning, but rather focuses on automatic responses to stimuli.

Mentalism, on the other hand, focuses on the invisible processes of the brain. This theory, also commonly known as cognitivism, examines issues surrounding intelligence, memory, and cognitive development. In other words, it is "the study of how people receive, store, retrieve, transform and transmit information" using the brain (Adult Education Unit, 1994, p. 2-15). By focusing on the mental processes that occur within the brain, this theory, like behaviourism, perpetuates the mind/body split and ignores the role of the body in learning.

Both behaviourism and mentalism share the common characteristic of creating and maintaining a mind/body duality. The mind/body hierarchy coexists with other binaries, including "thought versus action, self versus other, knower versus known world, [and] subjective versus objective" (Davis, Sumara & Luce-Kapler, 2000, p. 56). The commonality of all these binaries is the creation of separation between the learner and her actions, the learner and her environment, and the learner and other people.

History of the Mind/Body Duality

The separation of mind and body is not unique to behaviorism and mentalism. The Cartesian mind/body duality gained popularity during the Enlightenment, promoted by René Descartes who made the famous pronouncement, "I think, therefore I am." He believed that the picture of the world he received through his senses and his body could be deceptive and inaccurate; therefore, it was essential to rely on his mind, not his senses, to discover truth (Hooker, 1996; Descartes, 1641/1901). Based on the work of Descartes and other philosophers during the Enlightenment, the philosophy of rationalism was developed. Reason, rationality, logic and the capacities of the human brain were identified as the tools necessary to solve problems and to understand the world. With so much focus on the power of the mind, the body took a lesser position and a dichotomy developed. The mind was associated with reason, logic, divinity, and truth while the body represented passion, irrationality, and chaos. As Porter describes, "this hierarchical subordination of body to mind systematically degrades the body: its appetites and desires are seen as blind, willful, anarchic or (within Christianity) radically sinful" (1991, p. 213). The relationship between rationalism and mentalism is obvious. They both rely on the brain to understand the world.

> *I learned easily and early on how to be a "good student." Though I don't remember developing the skills that lead to academic success, they served me well through high school and my undergraduate degree. I am able to approach learning in an organized systematic manner that allows me to succeed academically. For me, learning was a very mental process. I relied on the mind/body dichotomy in my own views on learning.*

The myths propagated by the mind/body binary persist today. The focus on the mind can also be observed in everyday life as intellectual capabilities are valued over physical skills. For example, many parents urge their children to go to university, instead of trade school. The scientist, Stephen Hawking, is an illustration of how the mind can survive in a damaged body. Though confined to a wheelchair due to Amyotrophic Lateral Sclerosis (ALS), he continues to be a brilliant scientist. Similarly, Bill Gates has been portrayed as a man whose body is far less valuable than his mind (Lupton, 1995). A further example of the importance of the mind is the use of language such as "use your head" to admonish impulsive actions. The phrase "brains over brawn" also affirms the perceived authority of the mind. As these examples demonstrate, the mind continues to be considered superior to the body. Furthermore, as Hayles (1999) explains, since computers first appeared in the 1950s, intelligence has further shifted from a physical to a mental domain: "at the inaugural moment of the computer age, the erasure of embodiment is performed so that 'intelligence' becomes the property of the formal manipulation of symbols rather than enaction in a human lifeworld" (p. xi).

Gender and the Mind/Body Split

The mind/body hierarchy is closely associated with the male/female binary, where the male is superior. The characteristics of the mind are equated with masculinity while reliance on the body and emotions are considered feminine. Even prior to the Enlightenment this characterization of rationality as a masculine trait existed; in Ancient Greece men were considered to be the rational sex, and, therefore, capable of civic involvement (Sofia, 1993).

The characterization of rationality as a masculine trait persists today. First, Sofia

(1993) illustrates the persistence of the mind/body and male/female binaries. While she recognizes that there is a universal capacity for reason, she states that rationality is only associated with the field of formal logic therefore "its apparent 'universality' is an artefact [sic] of a history in which male-dominated institutions have valued abstract reason and mathematical principles of explanation over contextualised knowledge" (p. 22). Secondly, Chapman (1998) echoes the continued valuing of the mind over the body: "it is true, the body is an absent presence, the Orientalised Other of the mind, representing the antithesis of reason and objectivity." Thirdly, modern representations of the close relationship between the male/female and the mind/body binaries are observable in common language. As Kell (1983) states: "a woman thinking scientifically or objectively is thinking 'like a man'; conversely, a man pursuing a nonrational, nonscientific argument is arguing 'like a woman'" (p. 188 as cited in Sofia, p. 16).

Constructivism and Social Constructionism

In opposition to behaviorism and mentalism, more holistic learning theories have been developed. These alternatives view the learner as integrated within a larger environment. Constructivist and social constructionist theories both rely on the idea that "knowing is doing is being" (Davis, Sumara & Luce-Kapler, 2000, p. 69). In other words, knowledge comes from action and interaction with the environment around a learner. These two theories have been associated with both feminist education and adult education (Phillips, 1995 and Candy 1991, both as cited in Merriam & Caffarella, 1999).

> *My reliance on the mind as a source of knowledge didn't last forever. Eventually, there came a time in my life when I realized that learning was not just about attending school and that success was not just about getting good marks. I*

realized that learning is a part of everything I do; it is an essential part of being human. Succeeding in learning came to mean continuing to learn and grow, rather than meeting arbitrary standards. This new perspective made learning a part of my entire life. I was constantly discovering new things about my self, others and the world around me through experience, social interactions and exploration. My view of learning was no longer consistent with the mind/body split. I developed my own personal epistemology that relied on my academic skills but also drew on my intuition and my experiences and was based on my own values. I shifted my approach from rationalism to constructivism.

Constructivism focuses on the individual's interaction with the physical environment through the body. This interaction can occur through sensory information from the environment but it can also occur through active interaction with the environment. Learners create meaning from their "previous and current knowledge structure[s]" (Merriam & Caffarella, 1999, p. 259), which evolve from the unique experiences of the learner. Constructivists shift the centre of knowledge from the brain to the body; in other words, knowledge is embodied (Davis, Sumara & Luce-Kapler, 2000, p. 66). Embodied knowledge is contained within the body and expressed through the body, but it can also be "[included in] more worldly objects" (Davis, Sumara & Luce-Kapler, p. 66) that serve as tools to assist with memory and mental processing. From this theoretical perspective, learning can be described as a process of "adapting one's actions to ever-changing circumstance" (Davis, Sumara & Luce-Kapler, p. 65). Learning is an "active process" (*Constructivist theory*, n.d.). In this context, the instructor is responsible for providing "rich activities" (Davis, Sumara & Luce-Kapler, p. 66) that are

appropriate to the learner (*Constructivist theory*).

> *My online courses didn't provide very many "rich activities." It was very easy for me to spend my whole day reading and writing in front of the computer or working at my desk. I had to carefully organize my schedule to ensure I had some physical activity to do, other than my school work, everyday. Because my computer was located in my residence room, I had little reason to leave the building - I could have easily developed an unhealthy pattern of staying indoors all day. Soon after classes began, I started making plans to get out of the residence every day. A trip to the library or the grocery store was enough, as long as I got away from the computer and my work. Sometimes, I would even need to move around while working. I would pace in figure-eights around the floor of my little room. My study schedule also involved alternating classes to provide some variety in topics.*

Within the theory of constructivism, there is the more specific concept of radical constructivism which holds that "*any* kind of knowledge is constructed rather than perceived through senses" (emphasis in original, Riegler, 2000).

Social constructionism positions the theories of constructivism within a larger social context. Similar to constructivism, "life experience" is a source of knowledge (Glassman, 2001, p. 9); however, in contrast to constructivism, social constructionism asserts that understanding is culturally-based, and therefore, developed through interaction with other people (Glassman, p. 9).

> *The most important things I learned during my undergraduate degree were not learned in the classroom. They were learned living and working in the university residence program, specifically, living with many different people, being part of a*

community, valuing learning and leadership, and managing multiple priorities. It was those experiences that helped me identify my career plans and taught me to work and live with a variety of people.

It is the role of culture that differentiates social constructionism from the more individualistic constructivism. According to Vygotsky's theory on social constuctionism, "culture [is] the medium within which the two active parties to development [an active learner and an active environment] interact" (Cole & Wertsch, n.d.). This theory not only recognizes the influence of groups, societies and cultures in learning, it identifies them as necessary components. In contrast to Piaget who believed cognitive development would occur in children who did not attend school, Vygotsky argued that formal school and cognitive development were intrinsically related (van der Veer & Valsiner, 1991, p. 332).

My parents were important contributors to my educational experiences. Through them, my preparation for studying online started long before I registered in my classes. I think my first experience using a computer occurred when I was five or six years old. I played some games on it, and I learned some very basic programming skills. I got used to having a computer around the house and it became a useful tool for composition, entertainment and organization. Later, the Internet became a tool for research and communication.

My introduction to distance learning was also influenced by my parents. My mother was a teacher and helped me develop many of my academic skills. It was also through her that I learned to recognize learning opportunities outside of the formal classroom . She taught me the importance of education and of being open to new experiences. My father worked in the field of distance education. He

provided technical support for courses being offered by teleconference and videoconference. Because of these influences, new ways of learning, such as distance learning, were not foreign to me.

Social constructionists theorize knowledge as "embedded" in a "collective" (Davis, Sumara & Luce-Kapler, 2000, p. 67). Figurative bodies, rather than physical bodies, acquire and contain knowledge. The "student body" and the "body of knowledge" are understood as sources of embedded understanding in which the learner is situated. In other words "understanding is social in origin" (Cole & Wertsch), and just as an individual cannot exist in isolation, neither can understanding.

When I first imagined doing my master's degree, I envisioned a social constructionist and constructivist environment, though I didn't have the vocabulary to describe my ideas. I imagined a very collegial environment: a place with conversation, debate, and interaction, both social and academic. I thought it would challenge me on all levels to consider new ideas, new attitudes, and new behaviours. I imagined rethinking my ways of understanding adult education and student services to incorporate new theoretical perspectives and new experiences. I hoped for the opportunity to apply my integrated approach to learning in a supportive, challenging and, ultimately, rewarding environment. In my imagined scenario, conversation, discussion, and debate would be essential parts of my combined formal and informal learning experiences, which would occur within the classroom, but also in the hallways, the coffee shop, and the student lounge. The exposure to new people with different experiences would provide a wealth of opportunities for learning because they would each bring their own

understandings to share. Faculty members would act as mentors. As a relatively young graduate student, I would be able to learn from getting to know these people from different cities, provinces, countries and academic systems. At the same time, my unique experiences would be valued and acknowledged as important and significant for others. There would be an ongoing learning process that transcended the boundaries of formal and informal learning, academic and social environments, and academic knowledge and personal experience.

Social constructionists consider the role of language, history and tradition in knowledge construction and evaluation (Davis, Sumara & Luce-Kapler, 2000, p. 67), and they recognize that knowledge does not exist outside of social systems. Language is one social system, which is central to Vygotsky's writing about constructionism; however, his conception of language includes many symbolic systems: "various systems for counting; mnemonic techniques; algebraic symbol systems; works of art; writing; schemes, diagrams, maps, and mechanical drawings; all sorts of conventional signs, and so on" (Vygotsky, 1981, p. 137 as cited by Cole & Wertsch, n.d.). Social systems, like language, serve to provide a context for understanding, resulting in all understanding being "culturally, historically, and institutionally situated" (Cole & Wertsch).

I know something important happens when information/words are recorded/transcribed; they gain a degree of credibility and of permanence. I wonder how this impacts the online learning environment. I know some students are hesitant to post comments without perfecting them first. There is no blurting out ideas like there would be in a lively discussion. I wonder about what happens to my credibility when there is only my written words. Is what I say more

significant because it is typed in formal language on the computer?

On the other hand, maybe my ideas are more valid if I am physically there. What is considered more "true" or "right," my written words or my spoken voice? Does the objective presentation of ideas in writing with no emotional content make words stronger or does the emotion behind the words add to their value? Does a speaker's goal in speaking even matter or is it only the content that should be transmitted? I think that my emotion and convictions can be lost in the formal writing of the academic environment. The lack of passion makes ideas appear more certain but, at the same time, less impactful.

From a social constructionist perspective, the role of the instructor or "social interlocutor" (Glassman, 2001, p. 11) is to be both a "guide and [a] mentor" (Glassman, p. 11). This individual plays an important role in creating a dialogue to assist the learner in understanding the culture's social systems (Merriam & Caffarella, 1999). In this capacity, the instructor is responsible for creating situations or learning activities where the learner will face "doubt" (Glassman, p.11). When faced with doubt, the learner can be guided by the instructor to develop an understanding that will serve the long-term needs of individual as part of a society (Glassman, p.11).

I didn't experience doubt during my correspondence math course, and it's a good thing I didn't; I felt intimidated by the thought of contacting my tutor. I didn't know anything about him, and he could only be reached at certain times by phone. It also seemed that he was very much an authority compared to me. Our relationship was based only on his evaluation of my work. There was no sense of him guiding me through my learning experiences.

The instructor, who is situated within a particular social context, presents the learner who shares that context with situations, and assistance in examining those situations, so the learner will develop an understanding of the situation.

> *I didn't really feel my professors in online courses were situated in the same context as me at all. Maybe the physical distance made it harder for me to see the commonalities between our experiences. Overall, professors remained distant, physically and emotionally. Even though I knew their first names, I always thought of them as Dr. Someone. I didn't refer to them by their first names because we never really met. All I had was a name, and maybe a welcome message (that may or may not have been welcoming). But ultimately, they were just authorities who created materials, and assigned homework and grades. I didn't know them any better than I know the authors of my textbooks.*

In the process, the learner will also gain an understanding of the social environment in which both the learner and instructor are situated. In situations with multiple learners, "the classroom is also a social organization that is representative of the larger social community" (Glassman, 2001, p. 13).

> *I didn't always find the classroom "representative of the larger social community." The first day I was able to log in to my online courses in my master's degree was September 11, 2001. It was while I was exploring the course web site that I heard about the terrorist attacks in the United States. Soon, the city and the university community around me were mobilizing to house hundreds of delayed passengers. The university campus was an integral part of the process. It was obvious everywhere I went that the events in the United States were impacting my*

educational environment. But in my online courses, the academic world went on without a pause. There was no mention of the displaced passengers staying on campus. There was no discussion of how international events were changing the world. The only references to the terrorist attacks occurred at a teleconference session where one student explained she was calling in from Toronto as she waited for the airports to reopen, and another student who explained he was too busy helping out on campus to log in to the web site during the first week of class. The contrast between the real world, and the online classroom certainly didn't show that we were situated in the same social context.

Learning Theories in the Online Environment

Online learning organizations recommend that online learning opportunities be developed around constructivist principles. The American Distance Education Consortium (ADEC) recommends educators use "active, hands-on, [and] concrete experiences" (2003) and that they show the connection between the course material and real-life experiences.

A Chinese proverb says "Tell me and I forget. Show me and I remember. Involve me and I understand." I believe it is true. The courses I most remember are those that involved me the most. When I was studying online, course material seemed separated from the rest of my studies and my experiences. My courses on campus allowed for more involvement, and consequently, they are the courses I remember. They are also the courses that have most influenced my academic decisions, including writing this thesis.

ADEC also encourages the use of "problem-based" learning opportunities and self-

directed learning (2002; 2003). This group's guidelines for online courses even list "knowledge construction" as a "characteristic of quality web-based teaching and learning" (ADEC, 2003). All these recommendations clearly espouse the characteristics of constructivist learning theory where the learner gains knowledge from interaction with the environment through problem-solving and hands-on learning. Constructivist educators also advocate giving the learner the opportunity to make choices about learning based on previous experience, current interests, and perceived needs, which is also characteristic of self-directed learning.

> *I see myself as a self-directed learner because I make conscious decisions about my educational activities. When I need or want to know something, I take steps to find formal or informal learning opportunities, sometimes independently, sometimes with other learners, sometimes with more experienced people. Studying by DL made me reconsider my place as a self-directed learner. The association between self-direction and independence is fairly clear. Even if I'm learning with other people, I still maintain my own objectives and interests. I set my own standards and work at my own pace. I see this as a positive attribute of self-directed learning. But online, the feeling of independence soon gave way to a feeling of isolation. I was not able to access the equivalent quality of resources (human, academic, social, emotional) that I needed to reach my goals.*

Online learning also seeks to apply social constructionist learning theory. ADEC lists both collaborative learning and "the development of communities of interest" (2003) as important components of online learning. The organization goes even further by stating:

> the practice of distance learning contributes to the larger social mission of

> education and training in a democratic society. Changing mental models and constructing new knowledge empowers learners and encourages critical thinking. 'Knowledge becomes a function of how the individual creates meaning from his or her experiences; it is not a function of what someone else says is true' (Jonassen, 1995).

Clearly, the ADEC recognizes both the social position, and the social role and responsibility of online education. Similarly, Sullivan and Rocco (1997) identify "learning [as] a lifelong process, important to successful participation in the cultural, civic, and economic life of a democratic society." Both these statements recognize the importance of relationships in the learning process, and they recommend that relationships play roles in online learning. These guidelines for active learning and social interaction are echoed by other distance learning organizations from the United States (see Sullivan & Rocco, 1997), Europe (see Open and Distance Learning Quality Council [ODLQC], 2002), and Canada (see Barker, 2002).

> *What I found, in my online classes, was a very academic system that relied on independent learning. The chance to meet and interact with other students only occurred through a computer-mediated environment. Those students I did meet and get to know during my two years on campus were usually not in my academic program; they were from different disciplines. I decided to get involved in the Graduate Students' Union so I could meet other graduate students. Working on campus also provided opportunities for interaction with a diverse group of students. They came from different disciplines and different locations. However, this academic diversity limited our interactions in some ways. While we could*

relate to the common experience of being graduate students, there was not a common base of knowledge on which to start a relationship that would lead to learning about our own disciplines. Overall, these were social relationships, which led to learning about myself and the university community based on common experiences, rather than academic relationships based on common knowledge backgrounds.

However, despite the recommendation that constructivist and social constructionist learning theories be adopted and implemented, these suggestions have not resulted in practical application. First of all, there are contradictions inherent in the guidelines. The recommendation of active, "hands-on" learning implies that the learner will have physical contact and experiences beyond interacting with a computer terminal. One could argue that multimedia simulations can provide learners with access to situations beyond their computers; however, computer-generated situations are not the same as physical experiences in the uncontrolled and unpredictable "real world." The only hands-on contact in an online simulation is that of the fingers on the keyboard and the mouse. Furthermore, most distance learning programs still rely on written texts rather than multimedia presentations for the majority of their content. As von Prümmer states, knowing the guidelines and actually applying them are very different:

> many institutions are a long way from achieving and implementing what they know to be good practice.... despite lip-service to the use of a combination of media, most distance education remains dominated by print; we have not moved all that far from correspondence education. (2000, p. 197)

I always thought I was a visual learner and all the surveys I did agreed with that

idea. However, I think that simplifies too much. I think I gain much information through visual methods but I think the actions associated with visual learning are also important. Activities like taking notes, highlighting material, and physically holding the book are essential to retention. I know this because reading on a screen is much less effective for me. Maybe having a print copy makes material seem more permanent and more real. Listening to lectures doesn't help me learn material unless I am recording it in writing, and making it something solid, something tangible.

A second contradiction is obvious in the simultaneous recommendations for self-direction and for collaborative work. Situations that promote self-direction and flexibility for the individual learner are not always compatible with the type of educational situations required for collaboration. If the learning context enables the learner to progress through "modular, stand-alone units that are compatible with short bursts of learning" (ADEC, 2003), it is unlikely that all learners will progress at the same pace, a factor necessary for collaborative work. Being truly "responsive to learners" (Barker, 2002) can mean that the course is completed in any number of timeframes. Again, this flexibility can conflict with the concept of collaboration which requires connection across time and distance. This focus on collaboration also fails to recognize the learners who seek out distance learning situations in order to avoid the social aspect of learning (von Prümmer, 2000, p. 45).

When I needed to complete my statistics prerequisite, the easiest thing might have been to register for the class at the college where I was working. I was entitled to a free class each term, and transportation would not be a problem because I was

already there every day. But, I didn't want to spend four or five hours a week in a classroom doing a math course, plus taking home assignments to complete. I was already spending most of the day at the college, and I didn't really want to spend more time there or with those people. Taking the course by correspondence looked like the best alternative. I could fit my homework time into my lunch breaks, which would keep me organized. At the end of the work day, I could go home and have my evenings free. If I decided to take a day off from working on the class, that would be my choice. I didn't want to be bothered with rigid schedules, regular commitments, long explanations and class time. I knew I had a fairly strong background in math so I decided to take it on my own. I guess that social interaction wasn't as much of a necessity for me when studying math. Perhaps this is the mind/body split again - math is associated with the mind (and masculinity) so it can be studied academically.

A few months later when I took my education prerequisite classes, I experienced group work online. The assignment seemed simple enough: write a report in a group of three. We had access to an online chat room for meetings, plus we had a folder for posting information and e-mail access. Well, it almost made me wish I was working on my own.... I often find working a group with people I don't know to be frustrating because I like to have things organized and scheduled, while many other people are content to finish at the last minute. With the distance factor, being organized was essential, in my mind - but hard to achieve. Finding a meeting time for all the members of the group was a challenge in itself with the difference in time zones to consider. By the time I was home from

work in the evenings, it was already too late to meet. In the end, we agreed to meet on Sunday mornings, at 8:30 a.m. in my time zone. It was not the way I would have chosen to spend my mornings. Fortunately, the meeting place was easy to select: online meeting room #1. Eventually, we managed to select a topic, assign responsibilities and create a final project, but it seemed like everything took longer than necessary, and was harder than necessary. It was not an experience I would use to recommend online group assignments.

A third inconsistency between constructivist and social constructionist theories and the guidelines for distance learning is the focus on specific objectives. Specific objectives for the learner should respond to learners' needs and be "relevant, i.e., useful and appropriate for the intended learners ... observable/demonstrable [and] measurable" (Barker, 2002). Meeting these objectives limits the opportunities for learning that may not be clearly measurable or that may meet needs that the learner has not yet identified.

Finally, the guidelines value social interaction for collaborative learning while they allow learners to work without contact with other learners. In addition, all communication is mediated by technology which makes learners invisible to each other and ignores their embodied knowledge, which according to constructivists, is an essential form of knowing (Davis, Sumara & Luce-Kapler, 2000, p. 66). By excluding this type of knowledge, online learning is essentially relying on cognitivist learning theories which separate mind and body, valuing the mind over the body. If the goal of online learning is truly to provide instruction that is "free of cultural, racial, class, age and gender bias" (Barker, 2000), it is necessary to acknowledge and examine these issues rather than making learners invisible.

As the first day of my M.Ed. classes approached and I prepared for my first face-to-face class, I recognized one advantage of online courses - no one would see me and realize how insecure I was. They wouldn't know how young I was and that I had never done this before. I could hide that online. No one would have to know I was nervous. I could write well enough to disguise my anxiety, and hopefully, my inexperience. It wasn't until the end of that first term that I actually felt I could be a successful graduate student. The turning point was submitting my assignment for my first on-campus course. I don't know if it was the length and breadth of the assignment that convinced me that I was capable, or if it was the assignment itself which developed in parallel to relationships with the course professor, my classmates, and research participants. Weekly class meetings were filled with discussion as we each pursued our own research projects. Everyone got to know so much about the rest of the class. We knew each other's academic interests, concerns about the course, strengths and weaknesses, challenges in completing the assignment, and feelings about our progress. This type of involved, and challenging work, was not a component of my online courses, which required me only to write papers. Maybe the research component of the assignment, which forced me into new situations, or the personal investment in the project, was what made it so significant. Whatever it was, I know it was missing in my online courses.

Gender and Learning Styles

The following brief examination of learning styles will illustrate how gender, and the associated mind/body split, plays a significant role in preferred learning styles.

Similarly, certain learning styles, and their associated gendered learners, are valued in the distance learning context.

Separated and Connected Learners

Drawing on the work of Belenky, Clinchy, Goldberger and Tarule (1986) and their study of *Women's Ways of Knowing*, Dorothy MacKeracher (1993) proposes that learning types are gender-related. She outlines two types of learners: the separate/autonomous and the connected/related, preferred by men and women, respectively. While the first type of learner views knowledge as something distinct from the learner, the second identifies knowledge as the "believability of meaning given to experiences or interpretation of facts" (p. 78). The autonomous learner values objectivity, debate and analysis of information while the relational learner seeks connections with others and uses the experiences shared by others to expand his/her own holistic understanding. Yet again, the mind/body dichotomy is visible as the autonomous learner focuses on the facts and the relational learner relies on experiences and relationships. MacKeracher acknowledges that while the preference for one type over the other is often related to gender, with women tending to be relational learners, many learners are capable of using both approaches.

> *When I was working online, integration of my experiences was harder to attain. When I turned off the computer, it was as if I left the course behind. Other than worrying about deadlines and exams, the course was not a part of my life. In my face-to-face courses, I would often talk about the material, try to apply it in my other courses or reflect on it between classes. Bits of conversation would stick in my head and I would consider them for days after the class. Building connections*

between ideas, classmates and courses was an important way of processing the course content. It didn't happen with online courses.

Bricoleur and Planner Styles of Computer Users

Turkle and Papert's (1990) work illustrates behavioural differences in computer users based on gender. They identify two types of computer users, the planner and the *bricoleur*. The former relies on logic while the latter "constructs theories by arranging and rearranging, by negotiating and renegotiating with a set of well-known materials" (p. 136). Of these two styles, the planner, relying on logic, is the way of the "official computer world" (p. 135) and the one usually adopted by male users. The *bricoleur* approach is used by many female users who also tend to take a more physical approach to their learning about computers.

In their study of school children, Turkle and Papert (1990) found examples of the mind/body and male/female binaries. First of all, according to the researchers: "the girls, are less articulate and more physical in their explanations. They squirm and twist their bodies as they try to explain how they figure things out; and they get the right answer" (p. 144). Next, female students, both at the elementary school and the university, developed more personal relationships with their computers; a trend that is also exemplified outside of this study (Turkle & Papert). Third, the female users did not adopt the "distanced and objective" (p. 146) approach that is characterized as masculine. The following example illustrates one *bricoleur*-style computer user's relationship to the computer. Note how she also uses her body in her description: "when she talks about [the birds she has programed] her gestures with hand and body show her moving with and among them. When she speaks of them she uses language such as 'I move here'" (p. 144).

Within Turkle and Papert's (1990) study, the power of the dominant approach and the pressure to conform was obvious. Female university students learning programming, who preferred the *bricoleur* approach, felt pressured to adopt the dominant planner method of programming. The women in the study described feeling excluded because they preferred the *bricoleur* style. Eventually, they decided to adopt the planner method to reduce the pressure. The students described using the planner approach as using the "not-me strategy" (p. 134) and as "[faking] it" (p. 135) suggesting that the approach was foreign to them. Their choice to conform, and to distance themselves, is consistent with the trend of women withdrawing from fields dominated by formal logic and masculine approaches (Meyer, 2000).

> *I think I can be either a planner or a bricoleur. As a planner: Burge (1998) states the style of online courses may "drive [women] into inappropriate academic street-smarts (e.g., 'anything to get my degree')" (p. 32). I feel like I've been in this situation because I can take a very systematic approach to work. Rather than taking the time to really explore ideas, I've written papers on autopilot in order to get them done on time. I have limited my opportunities to really examine new information when I need to meet certain time objectives. When there are a lot of web sites to examine, I tend to do a very cursory glance, print off what I think might be important or interesting for later, bookmark the site in case I think I'll need again, and move on to the next one. I don't take the time to explore all the links, to follow links to other sites. I use my organization skills to get the work done as quickly as possible. As a bricoleur: When trying to organize the ideas for my thesis, I made concept webs or mind maps. I drew arrows to represent*

relationships between ideas based on research and my own experiences. I added more details as I thought of them, making an increasingly complex network of ideas. It seemed impossible to use a formal outline to organize all these interconnected pieces. Rather than understanding the whole, I linked the parts and waited for the whole to appear.

Hard and Soft Masters

Turkle proposes another system of classifying approaches to using computers: the hard master is similar to the scientist (or planner in the words of Turkle and Papert) while the soft mastery approach is closer to that of the *bricoleur* (Turkle, 1984, pp. 105-106, 108-109). Hard mastery involves developing a plan and implementing it to achieve a specific goal. Some flexibility may be required to address problems that occur. Hard programming "aims at complete control and mastery, transparency, analytical *dismemberment* of the whole into parts" (Zizek, 2001, p. 19). Soft mastery, on the other hand, has two components: the previously described bricolage approach as well as "a desire to work 'close to the object'" (Turkle, 1995, p. 59). Soft masters are more artistic in their approach, tending to proceed with much reflection on the process and the computer's response: "[soft programming] proceeds intuitively: it improvises, it works by trial and thus uncovers the new, it leaves the results itself 'to amaze,' its relation to the objects are more of 'dialogue'" (Zizek, p. 19).

There is clearly a social connection to the preferred learning styles and gender. Soft masters are more subjective and tend to be girls, while hard mastery is preferred as "our culture tends to equate the word 'soft' with unscientific and undisciplined as well as with the feminine and with a lack of power" (Turkle, 1995, p. 56). This tendency

correlates with the skills girls are taught and are valued as feminine, "negotiation, compromise, give-and-take" (Turkle, 1984, p. 109), while males tend to learn "decisiveness and the imposition of will" (Turkle, 1984, p. 109).

Conclusion

Both learning theories and learning styles can replicate the Cartesian mind/body split. As long as educational systems continue to rely - even unwittingly - on these theories, knowledge associated with the body will be excluded. As a result of that exclusion, certain learners will find their understanding is not acknowledged in the distance learning environment and their marginalization is increased. Alternative educational theories, in particular constructivism and social constructionism, create more inclusive environments, which include the experience of the body, but are rarely found in the online environment. A further discussion of the role of the body will be found in the next chapter.

Chapter 6: The Body and Bodies Online

As I am finishing my thesis, I am back to being a distance student with my supervisor and I in different provinces. I am also working full-time, much like I was when I began the prerequisites for my master's degree program. I have had much more experience with distance learning than I would have predicted at that time, and that experience has influenced me to study distance learning. Now, I am familiar with the field of distance education, both practically and theoretically. Unlike with my online courses, I am comfortable contacting my supervisor by e-mail because we have spent over a year developing a relationship through face-to-face contact. Now, I use e-mail to communicate with her because it is necessary and it is easier than it is to arrange phone calls to different time zones. But, mostly e-mail also feels more comfortable because of our relationship.

Introduction

Social constructionist and constructivist theories acknowledge that bodies play an important role in gathering information about the world, as well as in storing and sharing that information. In these processes, the body plays multiple roles, which will be discussed here. In the context of online learning, understanding the body also requires understanding how bodies relate in online communities, be they formally educational or otherwise. While not all communities online have an educational purpose, they all share common traits because they are influenced by social and cultural factors which are the fabric of life off-line.

How Knowledge is Constructed Through the Body

While the body is the physical part of an individual, it represents much more than just the bones and muscles. The different functions of the body can be considered as a series of roles that interact with each other and the outside world to serve different needs. However, ultimately, the definition of the body must be fluid because it involves the interaction of multiple characteristics, hierarchies, identities, and relations. The interplay of these qualities of the body results in an individual's unique way of knowing, their personal epistemology.

Senses, Movement and Experience

First, the body is composed of the nerves, senses and cells which interact with the environment to acquire new knowledge, thus knowledge and experience are constructed. The only way to know what is outside the body is through the body. As Polanyi states, "our body is the ultimate instrument of all our external knowledge, whether intellectual or practical" (1967, p. 15). The body serves as an instrument for gathering information as we touch, taste, see, feel and hear the environment, but it also takes in information beyond that gathered through the senses as we read, listen to speech, and manipulate objects.

> *Taking in information through the senses from the computer screen is not the same as taking it in from a book or printed article. I found reading from the computer screen very slow and it made my eyes hurt. I had to take frequent regular breaks and I could only read a limited amount at a time. After that, I would find my mind was wandering or my eyes felt dried out or the words were all blurring together. Reading on the computer was not the same as reading print*

materials. I couldn't add my own notes or highlight important material. Consequently, I printed most articles I needed to read, even though it required a lot of paper. Printed copies were easier to read and more permanent. I felt very separated from the material I read on the computer screen because it seemed harder to remember what I read and it was harder to concentrate. Healy confirms that this is often the case: "in most studies, hypertext has come in as a poor second to traditional text. Reading from a screen is slower, more fatiguing, less accurate, and more subject to information overload than standard reading" (Healy, 1998, p. 152). She also states that reading from a computer screen results in less comprehension and retention of material. My experiences tend to support her research.

It is through the acquisition of sensory information, considered in the context of previous knowledge, that a more complete understanding of the world is developed.

In the following example, science teacher Meyer illustrates that learning requires the active involvement of the whole person, including the mind, the body and the senses:

> Today our task was to describe in words the mechanics of swinging. I asked for a brave volunteer to sit in the middle of the circle, mime the movements of swinging on a lab stool and narrate the steps [...] She leaned back and stretched out her legs, then shifted forward and bent her legs back to the rhythm of an invisible swing. Strangely enough, we in the circle became participant observers as we swayed in our seats while thinking hard about whether or not the description we were hearing was accurate [...] a mind/body resonance compelled me to move back and forth rhythmically on my seat. Clearly, I was thinking with my body.

(2000, p. 83)

Meyer clearly illustrates that embodied knowledge is that which is acquired "from touching, listening and observing" (2000, p. 82). Her goal as a science teacher is to further expand the process of learning to include "participation with natural phenomena by enacting possibilities, interruptions, and interpretations, playing with variable relations, and using our bodies, voices, memories and imaginations" (Fels & Meyer, 1997 as cited in Meyer, 1998, p. 466). Meyer's descriptions indicate that learning and understanding are not just processes of the mind, but actions that clearly require active, physical involvement of learners, and their bodies. This concept is not new in adult learning. For example, Thomas (1991) relates how, early in the 20th century, Dewey proposed "learning by doing" (p. 5). Thomas also states that "learning is action" (p. 4); reminding the reader that learning is a verb suggesting activity, not passivity. Though learning is recognized as an active process, reluctance to acceptance the role of the body in the process still exists. It stems from the binaries previously discussed, male/female and mind/body. Because learning with the body is associated with femininity, body learning is often considered inferior to learning associated with the masculine mind. Meyer describes how the process of devaluing embodied knowledge occurs through the educational process:

> in the elementary classroom [...] interaction with objects is encouraged. However, in too many secondary science classes, students only read about their properties and behaviour. [...] As such, embodied knowing [...] appears insignificant in the classroom and in due time becomes dormant. (2000, p. 82)

By the post-secondary level, many women have rejected the field of science, so it persists

as a male-dominant subject area, further perpetuating the binary between the masculine mind and the feminine body.

Similarly to Meyer, Stinson, who is both a dancer and an educator, describes how her body is involved in her learning:

> As a person whose professional home has been dance for many years and whose personal home has been my body, I experience thought as something that occurs throughout my body, not just above my neck. Until I know something on this level — in my bones, so to speak — the knowledge is not my own, but is rather like those facts one memorizes which seem to fall out of the brain the day after an exam. Further, the knowledge that comes this way is not just about my physical body or even dance, but about the questions that drive educational researchers as well. My somatic self — the self which lives experience — is necessary in my struggle to find forms that represent my lived experience, whether those forms are presented on stage or in a scholarly journal. (1995)

The active involvement of this dancer's body is necessary for her to understand new concepts but somatic knowledge is not limited to those who dance. Stinson concludes that "while not all of us are trained dancers, we all have the capacity to attend to what we are experiencing on a body level." From a theoretical perspective, Stinson draws on the writings of Grumet, a curriculum theorist, to describe the relationship of one's body to one's understanding. Grumet states: "Maurice Merleau-Ponty called it the knowledge of the body-subject, reminding us that it is through our bodies that we live in the world" (1998, p. 3, as cited in Stinson). This approach supports Meyer's; learning and knowledge require the participation of the body.

Elizabeth Grosz provides additional support for the importance of the body in knowing. She argues that the body should not be viewed as separate from the mind; instead, she proposes that the mind and body should be considered as unified and interactive: "the unique meeting place of the corporeal (the body) and the circulating discourses (the network of ideas, practices, art, beliefs and so on that constitute culture)" (1994, p. xii). Grosz's statements are consistent with those of both Meyer and Stinson who have described how learning can not occur simply in the mind; they insist the body must be involved. Grosz uses the Möbius strip as a metaphor for the relationship between mind and body:

> bodies and minds are not two distinct substances or two kinds of attributes of a single substance but somewhere in between... The Möbius strip has the advantage of showing the inflection of mind into body and body into mind, the ways in which, through a kind of twisting or inversion, one side becomes another. (Grosz, p. xii)

While working on my thesis, I had neck pain and headaches from using a poorly designed computer work station. The pain affected all of my work. I had to plan my research and writing times with frequent breaks and I had to be prepared to change my plans if I was in pain. I couldn't concentrate or remember anything I read when I was in pain. My ability to compose my ideas clearly was gone. The pain in my body had a direct effect on everything I did. It was impossible to separate my mind from my body. I found my experiences echoed by Wendell (1999) in her descriptions of living with chronic pain. In both her case and mine, it changed how we viewed our bodies and our understanding of physical discomfort.

According to Polanyi, there must be an interaction between the mind and body, and the environment to develop new knowledge or new theories:

> a mathematical theory can be constructed only by relying on *prior* tacit knowledge and can function as a theory only *within* an act of tacit knowing, which consists in our attending *from* it to the previously established experience on which it bears (italics in original, 1967, p. 21)

Theory is based on experience in the world and must be demonstrable in the environment. Consequently, knowledge entirely based on theory, or reason, cannot exist; knowledge from the body is the source of theory and expression of theoretical material.

Limits and Boundaries

> *Taylor's comments about the body representing a person's presence makes me wonder about whether I feel present in online classes. I don't really feel like I am "in" a virtual classroom; I'm not somewhere different when I'm on my computer. Her comments also make me wonder how my participation is different in online and face-to-face courses. When I'm in a face-to-face course, I don't feel as if I need to say something to be participating. Listening actively, taking notes and nodding in agreement with other students' comments are ways I participate without saying anything. Because I am sitting in the classroom and paying attention to whoever is speaking, I am participating. The presence of my body and my attention show I am part of the course. Online, I don't feel that I am "in the virtual classroom." When I am posting comments, I feel I am present in front of my computer, in the real world. Both my body and my attention are there. Online, my body is not present so I have to make my presence explicitly known by posting*

comments, otherwise no one will know I am participating in the class. Like my body, my attention is not in the virtual classroom. I am often only devoting part of my attention to my online postings. There are other things going on around in me in the real world: the radio is on, the phone might be ringing, there are other computer screens or programs in the background, and there are print materials around me. If I need or want to, I can leave part way through writing a posting and come back later to finish. I wouldn't just walk out in the middle of a face-to-face class where I feel present and attentive.

Secondly, the surface and extremities of the body of an individual identify its boundaries, which are essential in developing "personal identity and individuality" (Heim, 2001, p. 81) because they separate one individual from another. The physical boundaries of a body also establish its presence; because it is contained within a particular solid form, it can be present and acknowledged (Taylor, 2002b). There is a very real physical process of establishing boundaries which can be observed in women who "discipline" (Battersby, 1999, p. 347) their bodies through dieting, cosmetic surgery and posture, which cause the body to be seen as a limitation, rather than a space for expression. Conversely, for men, the body is a means for exploration. Battersby explains that the "construction of a spatial field surrounding the female body [is] experienced as an enclose [sic], instead of as a field in which her intentionality can be made manifest" (1999, p. 347). However, establishing the limits of a body is not only a physical process; boundaries are also established through social inculcation. Grosz explains:

> the body becomes a human body, a body that coincides with the 'shape' and space of a psyche, a body that defines the limits of experience and subjectivity

only through the intervention of the (m)other and, ultimately, the Other (the language- and rule-governed social order). (1999a, p. 382)

Personal Identity/Inscription on the Body

Thirdly, the body is a surface upon which characteristics of race, gender, ability and culture are inscribed, influencing the identity of an individual and how that individual is perceived by others (Grosz, 1994). Bramble, a graduate student, describes how cultural markers affect her self-perceptions and the perceptions of her classmates:

> Clearly if, in the first class, I had invoked my identity as a black, immigrant, Caribbean woman, making explicit how my colleagues might read my body, there is no guarantee that they would read my body the way I want or that I would get a sense of belonging. Even if I did, that feeling probably would not have lasted for the rest of the year. (1999, p. 139)

Bramble made her comment in response to a situation where she, and her classmates, presented themselves as "graduate students (read: devoid of race, class, gender, and other markings of identity)" (Bramble, 1999, p. 137). Bramble proposes that because "the body is central to knowledge production" (2000, p. 277) and "bodies are embuded [sic] with knowledge" (2000, p. 278), perceptions of, and ways of understanding, the world are fundamentally influenced by the body. According to Chapman, as Grosz theorizes about the body "she distinguishes between theories that are 'inscriptive', that focus on the body's surface as the site where social, legal, moral and economic norms are inscripted, and approaches which focus on the interior, or lived body" (as cited in Chapman, 1998). Those bodies that are not consistent with the norm face exclusion. At another point, Bramble (2000) describes her inability to find a supervisor whose body would provide

the understanding necessary for her research, which exemplifies the lack of recognition of bodies which fail to fit within the hegemonic structure of the university. As a result, some perspectives and ways of knowing are not valued, a situation which is "exacerbated by the lack of bodies like [Bramble and other Black women's] in the professorate" (p. 279-280).

Simmonds (1999) recounts similar experiences to those of Bramble. As a Black woman, she is constantly aware of her identity as an other in the academic world; she has access to "certain private information" (p. 51) due to her racialized body and the discourses surrounding that body. According to Simmonds, the mind/body binary is present in the traditional approach to theory development: "theory thus becomes only that knowledge which is created from outside ourselves, outside our bodies, out of our head (as it were). It is as if 'facts' came out of our heads, and 'fictions' out of our bodies" (p. 53).

> *My experiential "truth" came from my body. When I was working on my thesis, I found that it was easier to compose my personal reflections on paper rather than on screen. Maybe this preference for writing by hand is because I am used to writing personal messages by hand. For most academic papers and the content sections of my thesis, I can comfortably compose on screen. I write notes in birthday cards by hand, and I record my thoughts in my journal in handwriting but I use the computer for writing papers and for doing research. For my narratives, I would write my notes by hand and then expand them on the computer. The intermediate step of writing on the paper seemed necessary for the more personal nature of my narrative. Writing my stories by hand also produced an original*

version that reflected me. The stories seemed more personal. Because I know my handwriting, I could tell they were uniquely mine. I could easily distinguish them from the factual content of my thesis. This reminds me of a situation Turkle described. One faculty member, from the School of Architecture and Planning at MIT, made this comment following the introduction of computers for use in the classrooms and laboratories in all departments: "You love things that are your own marks. In some primitive way, marks are marks.... I can lose this piece of paper in the street and if [a day later] I walk on the street and see it, I'll know that I drew it. With a drawing that I do on the computer... I might not even know that it's mine" (1995, p. 64).

Seeking to transform the way theory is developed, Simmonds "[challenges] the limits of theories that will not admit our embodied realities" (p. 61). By refusing to let her "body [...] remain 'voiceless'" (p. 60), Simmonds uses her racialized body as a site for political action and struggle, recognizing that "bodies are maps of power and identity" (Haraway, 2001, p. 36).

In online classes, bodies weren't there to provide me and my classmates with the necessary "maps." I had to wander blindly. I had to design a map of myself (an unfamiliar task) to show to my equally blind classmates, and I had to try and read their experimental maps. I wondered how much about myself I wanted to reveal in my introduction. How do I want to write my comments (seriously, humorously, formally, informally etc.)? Can I trust these strangers? Do I want to admit how uncertain I am or do I want to portray confidence hoping it will give rise to the feeling? I hope the decisions I made presented me as a real person, with a variety

of experiences and abilities. In the extreme, this process could become a conscious examination of myself and my identity, if I wanted to describe myself accurately and explicitly to my classmates. To make a complete and accurate map of myself, I would need to explore like the historic cartographers, adding and revising as I learned more. To describe this map to my classmates would require pages of text (think of the length of biographical books). It would be impractical, yet it still leaves the question of what I need to share to sketch the best map possible and what makes it the "best" map (accuracy, detail, overall context, major features, small detailed focal points). Does the policy of "be yourself" really apply online or are people more concerned with presenting themselves as they wish to be seen? Are people so busy developing the ideal map that they overcompensate for traits/behaviours they don't want to present? Do they rely on the feedback they get in the real world to shape their maps or do they imagine they can start with a blank slate and develop their own maps?

Similarly, as an online tutor, I was concerned about having a caring, supportive, encouraging online persona. I had to create a map of myself that would make the students I worked with feel they could trust me and my comments, that I respected them and their work, and that we could work together to improve their writing. Though I did all of these same things while tutoring in person, online it seemed even more important because it was so much harder for me to judge the students' reaction. I did not want anything to be taken out of context or to be seen as critical when that was not intended. My choices of language, writing style, vocabulary, and syntax were all carefully crafted to be clear, supportive and

respectful. I wonder if, as a result, I was too positive and not realistic enough in my feedback. I can't be sure. I received conflicting feedback from the students I worked with online. Some found me very helpful. They said my comments were clear and helpful. But others found my comments confusing and difficult to understand. My feedback was not what they wanted or needed but they didn't articulate how I should change. Maybe it was just as hard for them to define themselves online as it was for me to try and respond to them.

Information Storage

Fourthly, the body is a storage place, where experiences and knowledge are stored within the mind, and skills and abilities, within the muscles. According to Polanyi, individuals have knowledge whose presence and origins they can not explain (1967, p. 4), information and experience that are stored within the body and the mind. Zita echoes that the body plays a role in storing knowledge in ways that cannot be articulated:

> Theory-making need not exclude moments of in-articulation, of intuition and subconscious access moving towards words. These ways of knowing feel immediate: we commonly say I knew it 'at once,' 'in my bones,' 'in my gut,' 'in my heart,' or 'at first sight.' We place these ways of knowing in an infallible metaphorical body, one we can trust. (1998, p. 206)

Prichard, in the context of the knowledge society and the knowledge economy, describes how knowledge is embodied in the workers within organizations. He explains that it is not the Marxist body of the labourer that is now valued within the organization but the knowledge-filled body of the employee. The employer seeks the body that presents "innovative performance, [and the] desire to share and tacit knowledge"

(1999, p. 7). Relying on the work of Fay (1987), Prichard describes his understanding of embodiment:

> here the detailed 'etching' of skeletons and muscles, (...) in ways which turn the body into the site of where 'ideas and identities' potentially fuse [(Fay, p. 152)]; leads to an appreciation of the way *meaning* is not so much *found in the mind,* or some psycho-symbolic space, but more usefully understood as 'inscriptions *carried in the physical bodies* of those who engage them' ([Fay, p. 150)] emphasis added [by Prichard]) (Prichard, p. 3)

Unlike in the other examples presented, the body being referred to here is the male body of the worker (Polanyi, 1969 as cited in Prichard). The body is a source of information, skills and experiences unique to each individual. In the business world, this body becomes a source of competition; the worker and the employer both want access to the information stored within. As Prichard explains, despite the increasing reliance on computers and technology, "the 'body' rather than being discarded as unnecessary [...] remains a crucial site for economic relations" (p. 7). Writing about the position of embodied knowledge within the business world, Prichard's goal is to gain access to this knowledge for the benefit of the organization. In an exploitative fashion, he describes how "the institutional or firm's task becomes how to make this knowledge explicit, or codified, or how to reconstruct the learning process so that valuable knowledge as it is generated can be 'harvested' or distributed to enhance organizational efficiency, or market relations" (p. 2).

In an educational environment where knowledge acquisition does not hold such a competitive focus, Prichard's harvesting of knowledge could be reinterpreted as sharing of

experiences for the benefit of other learners. This interpretation maintains the concept of the body as a place for storing knowledge but allows that, in some situations, sharing that knowledge does not represent a loss of control but rather an opportunity to acquire new understanding from others.

Expression and Body Language

Fifthly, through emotional reactions, physical contact and self-expression, the body is an instrument of communication with other individuals.

Research by Vertegaal at Queen's University shows that subjects are more likely to participate in conversations when they make more eye contact. Vertegaal states that "there is a ridiculously big correlation between the amount of eye contact and the amount people speak [...] eye contact is one of the most intimate acts - almost as much as touching" (as cited in "A Lock on Conversation," 2002, p. H1). Technology, even video conferencing, "hampers conversation because there is no real eye contact between people. Without eye contact, people aren't encouraged to talk and share their views" ("A Lock on Conversation," p. H1).

In an educational setting, the body can be a source of information for the learner about the atmosphere of a learning environment. Students report physical body actions and internal reactions to the emotional condition and physical settings of an educational situation and to events outside of the educational context. They also identified bodily reactions that occurred with learning and with a failure to learn (McClelland, Dahlberg & Plihal, 2002, pp. 5-6). This awareness of body actions and their meanings can benefit both the instructor and the learner by providing information about the learning environment, external distractions and the quality of learning.

Without body language online I found it harder to interpret the response and/or lack of response to my comments. I remember a discussion about feminist research methodologies in one of my online courses. It made me think about a discussion in a previous class about whether men can be feminists. I thought this might be an interesting idea to consider: can men design and carry out feminist research questions? I wasn't sure of my own stand on the question but I suspected that there would be other people in the class who might have strong opinions on the topic. I wrote a posting that outlined my perspectives on the questions and posted it. I expected an immediate response in the class of thirty-plus students. Maybe I wanted to introduce some controversy, but at least, I predicted that someone would post a passionate response about the issue. There was not a single response to my posting. Not even a single statement saying "interesting question," or "I'll have to think about that." I don't know if people just skipped my posting - it was one of hundreds in the discussion board. Maybe they were just too busy to post a response. Maybe they just didn't care about the topic. I had no clues to their motivation. No one posted a response to my comments. I was really disappointed because I wanted the opportunity to explore the issue and decide if men could do feminist research. (I have since decided that gender is an important part of feminist research so it has unique insights to offer to women in pedagogical research.) Months later, when I was preparing to teach a lesson about positive and negative reinforcement, I read that the best way to eliminate a behaviour is to ignore it. Without any reinforcement, that behaviour will gradually disappear. I wonder if that is why it became harder and harder to motivate myself to post

comments in some classes. When I didn't get responses, it would have been easy to stop posting my ideas. However, my participation mark was a strong motivator to keep writing comments, even when no one responded. I think my feeling of disappointment (and my participation mark, of course) might have contributed to my habit of posting responses to a wide range of postings, even when I had only a few sentences to write. Posting responses seemed like the online equivalent of nodding my head in agreement or smiling in support; although, it would have required a lot less effort to just nod or smile as I read the posting than it did to verbalizing my response.

Online Communities

Educational environments are not the only place that people gather online. Many people communicate online for social reasons; they seek opportunities to meet and chat with other people in online communities. Because participation in these communities is more voluntary than the participation in online learning communities, there may be opportunities to learn from these other online settings. They could provide information that would help improve the online learning setting by providing a different perspective on online relationships. In order to use online communities to improve the online educational setting, it is necessary to look at how these communities develop and operate. First, online communities are influenced by off-line social factors. Secondly, they are language-based. Thirdly, they recreate physical bodies and locations. Next, they allow for anonymous interaction. Finally, they operate around different value systems.

Online communities are developed and inhabited by people who live in the "real world;" therefore, they are not free from social and cultural influences. The individuals

who develop the code, which defines online worlds, are products of the social class structure, linguistic traditions, and social systems of the real world. As a result, they design communities which reflect the real world or which deliberately oppose it. Taylor explains that degree of input from the graphic designers and programmers can vary but "ultimately all spaces carry with them values embedded by designers via code" (2002a, p. 4). When designers are associated with businesses, they also incorporate their corporate values (Shade, 2002, p. 5). Cyberfeminists have used this ability to incorporate values that promote their causes (Shade, p. 47). Designers control how participants will be able to interact through avatars, online graphic-based representations of themselves. The degree of detail in facial expression of online characters can influence how participants interact, and how real and believable relationships are (Taylor, p. 5). Social and cultural interactions are also influenced by the choices of skin tones, features and body types available to participants (Taylor, p. 7). Participants are also allowed a choice of species and genders, including a fictional third gender called Spivak (Taylor, p. 8). Designers are also responsible for the development of communities. They determine to what degree "responsibility, accountability, and community" (Taylor, p. 5) are part of online interactions. By limiting the frequency with which participants can change their identities, virtual communities require participants to accept more responsibility for their actions; this type of limitation can be implemented through controlling virtual money or implementing rules about appropriate behaviours (Taylor, p. 5). Those who design online worlds determine how much control over the community they will maintain and how much will be left to the participants of the community. The same is true in the educational setting, where software designers and faculty members make decisions about

how students will interact with each other, the content and their instructors.

> *I'm not sure how these online communities manage to make any decisions by consensus. When I signed onto online chat rooms, I found that I was just overwhelmed by the number of conversations occurring simultaneously. It was like being in a room full of strangers all talking at once. Why would I want to walk over the virtual door sill and be a part of it when I could turn off the computer and have a conversation with a real person? Or better yet, I could go out for coffee somewhere cozy and relaxing. When I decided I actually had something to say, usually trying to introduce myself, I had to figure out the commands necessary to post my comments. It was just too complicated to actually do anything other than read the conversations; it was not very interactive for me.*

Online communities rely on language for most interactions, language which is inherently political. Language is already embedded in power relationships. For example, English is the predominant language of the Internet and online communities (Healy, 1998, p. 250). The use of language illustrates social and cultural values. The use of language illustrates assumptions about online communities. For example, communicating online asynchronously through typed messages is called "chatting." This particular use of language can suggest informal communication, an existing relationship or verbal interaction. The word *chatting* implies more of a connection between people than an alternative such as "computer relayed communication." Lakoff and Johnson (1980) explain that metaphor as a linguistic device influences how people understand the world. Consider the language associated with the Internet; both the terms *net* and *web* suggest being trapped or confined, at the same time as they suggest connections and relationships

between ideas. Language is also essential to the educational environment, as the previous discussion of the vocabulary of distance learning illustrated. Written language is also the primary means of communication in online courses where content is provided in text form and assignments are submitted in text form.

> *The use of language online does not necessarily translate into easy communication as I discovered during a group project online. Arranging the group meeting was as complicated as was the meeting itself. My groupmates lived in one province and I was in another. It took numerous messages to arrange a time to meet. The place was easier to select - online meeting room 1. The time we arranged to meet on a weekly basis meant that I had to be online at 8:30 on Sunday morning. As we started our first meeting, the novelty quickly wore off. Discussing things in a chat room was just frustrating. The use of online technology and the software were both challenging. There was no feature that allowed me to edit my text after typing it except to delete it and start again. There was also a limited space for writing messages so a thought may be expressed in two parts with other participants' comments in between:*
>
> *Jenna: Hi. My name is Jenna and I am taking this course from*
>
> *Student 2: Hi. Welcome.*
>
> *Student 3. Hey. Good to see you both.*
>
> *Jenna: another province.*
>
> *(The limited space became even more of an issue as we tried to narrow our topic and select tasks.)*
>
> *Jenna: Do you want to look at apprenticeship? Will you compare*

Student 2: Yes. I'll look at apprenticeship. A comparison between provinces

Student 3: I'm interested in apprenticeship. What are we comparing?

Jenna: the provincial systems?

Student 2: might be too much to take on.

Student 3: Oh we both want the same topic. What are the other choices?

Jenna: So do you just want to focus on NL's system? I can easily get info about AB

Student 2: We also mentioned looking at university transfer programs.

Student 3: I think we should compare AB and NL. What about the national system?

Jenna: I could look at transfer programs.

Student 2: Oh. I thought you wanted to compare all the provinces. I agree

Jenna: Are talking about the national apprenticeship system or national transfer programs?

Obviously, it was difficult to keep the lines of conversation clear. Especially with the delay of typing a response and reading the comments that came in between. Sometimes, I would be answering one questions when another was posted. Part way through an answer I would discover I had mixed up the information and needed to start again. On top of the communication problems, there were technical problems that would periodically cause one of us to get kicked off the system and that person would need to log on again. The remaining two participants were never sure if the third was thinking, gone or trying to get back. Upon his return, that person would have missed some information and needed to be updated.

Participants in online communities seek to recreate physical locations and

physical bodies in virtual cyberspace. Online worlds are described in detail, including landscape, architecture, interior design, furniture and atmosphere. These attempts to replicate and improve upon real places confirms the importance of physical place in human interactions. Similarly, online characters or avatars are accompanied by detailed descriptions of appearance, clothing, personality, and interests. Again, creating a connection with the tangible body is the goal. Taylor confirms the importance of roles: "the bodies users create and use in virtual spaces become inextricably linked to their performance of self and engagement in the community" (1999, p. 3). Depending on the graphic capabilities of the online community, the avatars may also be represented visually. They may move within the virtual community, interact with objects and other avatars, and express emotions. The degree of expression and detail contributes to the realistic quality of the environment (Taylor, 2002a, p. 5). When visual cues are not available, textual cues provide emotional descriptions (Taylor, 1999, p. 9). Other online communities use the virtual surroundings to make participants feel more comfortable. For example, retailers use virtual malls to attract women to the Internet and to online shopping, and to market their products to girls (Shade, 2002, p. 55, 67). Similarly, designers of educational software develop their products to resemble a traditional classroom with sections for content, a library of resources, and a coffee room for informal discussions.

Online communities provide an opportunity for anonymous interactions with a wide range of individuals. The perceived safety of this situation allows participants to experiment and explore multiple identities. As Heim describes, "cyberspace is more than a breakthrough in electronic media or in computer interface design. With its virtual

environments and simulated worlds, cyberspace is a metaphysical laboratory, a tool for examining our very sense of reality." (Heim, 2001, p. 70). In this virtual laboratory, computer users can examine questions of identity and explore relationships. Participants in online communities can adopt personas with characteristics they wish to acquire. By practicing behaviours and interactional styles in the virtual environment, individuals can hone their skills which can then be transferred into the real world (Civin, 2000; Turkle, 1995, p. 205). From this perspective, online interactions can have a therapeutic quality. The other side to anonymous interactions is the uncertainty about how people portray themselves. There are many cases of individuals adopting different genders, races, abilities and ages. Portraying these different characters, when they are not realistic representations, can lead to unreliability. The lack of authenticity and honest representation can result in disappointment, if the truth is discovered. With these unknowns, there are also questions of safety and security (Shade, 2002, p. 85).

> *I get frustrated when I have to provide my personal information to use a web site, etc. I can't remember all of the log ins and passwords to access these sites, and I don't really want to use the same passwords every time for security reasons. I also don't want to provide my personal information to unknown sources for unknown purposes. In some classes I had to register with third party sites to access information as part of course assignments, such as visiting different sites and comparing them. I wonder if the university should take any responsibility for safety in online courses. Just because students are not participating in laboratory activities or field trips, safety isn't addressed. Because it is the Internet and participation is virtual, it is assumed that people are safe and that they have the*

necessary experience to safely manage their personal information online. As well, there are also health issues related to using computers and the Internet (see Updegrove & Updegrove, 1991; Healy, 1998). Questions of electromagnetic radiation, ergonomics and lack of physical activity are also not discussed as part of the online learning situation.

In online communities, ethical systems operate differently. First, their consequences are less extreme. Individuals can adopt new personas if they fail in one persona. These disposable identities allow individuals to take less responsibility for their actions. Secondly, lack of immediate interaction changes the perceptions of accountability. As Heim explains, ethical systems are different online and their nature is still unclear: "face-to-face communication, the fleshy bond between people, supports a long-term warmth and loyalty, a sense of obligation for which the computer-mediated communities have not yet been tested" (2001, p. 82). The lack of connection may explain the acceptance of adopting multiple personas or inaccurate personas. Taken to the extreme, online environments may allow individuals to behave in ways which they would not otherwise act because of the lack of perceived consequences. Guidelines for acceptable behaviours and "social taboos" disappear when users are surrounded by faceless strangers (Caldwell, 1999, p. 120). Anonymous, online communication methods "[tend] to encourage flamboyant, outrageous or nasty behaviour" (Brail, 1996 as cited in Shade, 2002, p. 80). Without human contact, "the machine interface may amplify an amoral indifference to human relationships. Computers often eliminate the need to respond directly to what takes place between humans" (Heim, 2001, p. 83). As previous discussions illustrated, computer mediated communication is not the same as face-to-face

conversation. This statement is also true in the educational environment where students rely on more academic language rather than informal conversational style.

Conclusion

Bodies and bodily knowledge both play an important role in learning and understanding in the educational environment. Bodies are not only an important source of information about the environment; they are also a means of storing and sharing information. In the larger online community, social relationships that occur off-line, and/or in educational settings, are replicated according to recognizable motifs. These patterns show that online interactions are value-laden and must be considered within the current social context. Understanding the presence of the patterns may help educators to develop educational environments. The following chapter will look more at the changes possible with an understanding of the body in the online learning environment.

Chapter 7: Reflections and Recommendations

Writing this thesis was an amazing learning process. Not only did I explore many new ideas, but I had the opportunity to explore my own experiences. In doing so, I recognized the value of these experiences; they might not have been what I expected, but they did lead me to a better understanding of my self and how I learn. Had I not taken online courses, I may never have written this thesis. During the thesis-writing process, I consciously looked at my self as a learner. I realized how important it is for me to have other people around to share ideas and enthusiasm. For me, it is also essential to be able to connect what I learn to my own experience. Discovering the narrative method allowed me to incorporate my experiences in graduate school into a larger framework of knowledge. My educational experiences became a valid part of who I am and who I will be.

Introduction

In the last six chapters I have examined distance learning, learning theory, and the role of the body in learning, leading me to conclude that distance learning fails to acknowledge some forms of knowledge, in particular, those which are associated with the body. Bodily knowledge as a way of knowing is positioned within the academy as a marginalized way of knowing. Bodily knowledge is also primarily associated with marginalized groups like women and other minority groups. Failing to acknowledge this type of knowledge means excluding certain learners and their knowledge. In this final chapter, I reflect on my experiences as a distance learner. I also present some recommendations for online and distance learning and some suggestions for further

research in online and distance learning.

Recommendations for Improving Online and Distance Learning

Changes to the online learning environment may be able to make it more inclusive and more accepting of alternate forms of knowledge. The following are some suggestions for making these changes:

1. Implement a "policy of nondiscrimination based on technology access" (Burge, 1998, p. 27) to ensure that all learners can access courses. Some institutions have introduced policies to ensure their courses are accessible to students with disabilities. However, in addition to students with disabilities, other students are excluded because of the financial cost of technology, inability to access the necessary equipment, outdated computer equipment and slow Internet connections, insufficient skills, and a lack of familiarity with the hardware and software.
2. Implement a similar policy to reduce discrimination based on location, availability of resources, and time zones. This policy could include not charging distance learners for additional services, developing partnerships to allow the host institution to promote local resources to assist learners, and recognizing the impact of time zones when scheduling synchronous meetings.
3. Implement the recommendations of distance learning associations to create an environment where constructivist and social constructionist learning can occur. Further study may be necessary to be able to effectively identify and implement changes.
4. Acknowledge that there are safety issues in online learning. Provide an

orientation that considers issues, including privacy and the risks of sharing personal information, as well as the health risk of prolonged computer use.

5. Use online technology as a supplement to face-to-face learning. For example, online learning discussions could be used to continue discussions between weekly classes. In this case, students would have the benefits of face-to-face learning, as well as the opportunity for ongoing asynchronous communication to explore ideas between formal meetings.

6. Include on-campus residency periods for student near the beginning of online courses. The time spent on campus would allow students to form connections, to meet instructors and to develop relationships. As a result, they would have established a feeling of community before engaging in online interactions. Some institutions already include required on-campus sessions. For example, MUN's Master's of Social Work program includes three, two-and-a-half week institutes on campus (MUN, 2003b), while many of Royal Roads University's programs require a two to five week residency period (Royal Roads University, 2002).

7. Use online learning for training rather than educating. Students could benefit from review modules, self-paced study or online research to supplement their course work; however, the majority of the instruction would occur in the classroom.

8. Use online technology to link experts. They would have to be individuals who already share a common knowledge base and computer experience. With this common background, they would then be more able to share their experience. Mailing lists and bulletin boards run by professional organizations currently

provide this type of interaction. More formal mentoring relationships or professional development groups could be developed to promote learning and sharing.

9. Study student and faculty experiences quantitatively and qualitatively to assess the true value of online learning experiences. Currently, the research is mixed in its conclusions about the educational value of distance learning. It would be necessary to do this research in settings that permitted students to experience both online and face-to-face learning, and that provided the freedom to express dissatisfaction with their experiences as well as giving positive feedback. Longitudinal studies may allow for a better understanding of how information is retained and applied following distance learning experiences.

10. Acknowledge diversity explicitly by creating environments where students can express themselves freely and completely. This recommendation should be applied in both online and face-to-face learning environments. Acknowledging the diversity of learners, background, interests, skills and learning styles will allow learners to recognize their own unique qualities, as well as those of other learners. Familiarity and comfort in environments where diversity is present will also have benefits outside of the learning situation.

11. Discuss questions of identity within the online environment, examining how language influences interaction, and consider how distance and absence of the body affect relationships in the online classroom. Students should be given the opportunity to discuss their experiences as distance learners and to reflect on how they learn within this environment. Examining questions of the body will allow

for self-reflection on students' individual learning experiences and on how they are positioned within the distance learning setting.

12. Develop ways to offer effective support services to students who cannot access services in-person. Students studying at a distance may require the same academic and personal support as those on campus, particularly, if they are not available in their home community. Partnerships with local service providers may be one way of addressing the need for services, but there may also be ways to provide services to students over a distance.

Table 1 *A summary of my reflections comparing online courses to classroom courses.*

Online courses	Classroom courses
1. excitement about a new course	1. excitement about a new course
2. hopefulness that this course will be better because it has a different instructor, different content, different students	2. interest in getting to know the new instructor, new content and new students
3. an enthusiastic start – that 'first day of school' feeling	3. an enthusiastic start – that 'first day of school' feeling
4. a feeling of isolation	4. choosing an area of interest for more in-depth study
5. detachment from course material when away from the computer	5. anticipation of weekly classes as a chance to exchange ideas and to ask questions
6. lack of connectedness between different courses and real life	6. making frequent reference to classes outside of class time informally with friends
7. more independent work	7. an energized feeling after classes end for the day
8. posting comments for the sake of participation marks rather than from engagement	

9. disappointment at the lack of response leading to fewer postings
10. more concern about deadlines as I get busier and a feeling of doing the work just to get it done
11. doing the minimum work necessary to succeed rather than exploring as much as I might like
12. a feeling of relief at the finish of the term rather than a feeling of success or a new beginning
13. a sudden ending by logging off for the last time; no connections = no goodbyes

8. a feeling of being busy yet still having the scheduled class time for concentrated consideration of the material
9. weekly classes motivating me to prepare
10. independent work between classes supplementing in-class work
11. anticipation as I prepare for the next class
12. a sense of a cycle with one class leading to another
13. a feeling of completion at the end of the class yet some disappointment about it ending
14. a feeling of completion with expressions of goodbye/good luck to and from others

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Recommendations for Further Study

Throughout this process, I noticed gaps in research that could lead to further study. Here are recommendations for further study:

1. Conduct narrative research drawing on the experiences of a larger group of graduate students from diverse backgrounds. Studying the stories of learners with different backgrounds, including age, race, gender, educational experience, programs of study, and technological expertise, will provide a richer understanding of the experience of being a distance learning student. With a better understanding of what it is like to be a distance learning student, educators and administrators

will be better equipped to design programs, online or on campus, that address the needs of these students.

2. Research faculty experiences teaching online, especially those who work to create inclusive environments. In the same ways as students bring diverse backgrounds, faculty members present a wide range of backgrounds, teaching methods and instructional strategies. Some faculty members are working to develop environments and processes that produce more inclusive learning environments. Sharing their research with a larger audience can lead to wider dissemination of their findings and encouragement of more innovative techniques.

3. Explore ways to implement recommendations of distance learning organizations' to create effective learning environments. As previously discussed, distance learning organizations recommend creating inclusive situations where students construct their own knowledge; however, these recommendations are not always implemented. Exploration of the barriers to implementing these recommendations could lead to strategies for more effective and more extensive implementation.

4. Examine why students choose distance learning courses and what institutional barriers may prevent them from making other choices. Rather than studying why students are choosing online courses, consider why they are not choosing to attend classes on campus. Consider physical barriers, psychological barriers and policy decisions that may prevent those students who wish to study on campus from doing so. This study may also include questioning potential students about the barriers they perceive to preventing them from pursuing their studies on

campus. Berge and Muilenburg (2003) are currently undertaking a study of the perceived barriers to online learning. Berge has also completed research about learning barriers as perceived by administrators (2002).

5. Study policy decisions of government, business and post-secondary institutions from a critical perspective. A better understanding of factors, external to learners, that are influencing their educational experiences, can lead administrators and faculty to raise concerns about situations that compromise the best interests of learners.

6. Investigate the health impacts of online learning. There has been some research on the effects of extended computer use in business, showing that exposure to electromagnetic radiation and working at poorly adjusted work stations can cause physical harm to individuals. There may be similar risks to online learners, and if there are, the learners should be made aware of them.

7. Examine safety issues related to online learning. As with health impacts, there may be safety concerns related to sharing personal information on the Internet and to extended periods of time working in isolation. Learners should be aware of the potential risks they may face in their courses, online as on campus. Furthermore, awareness of risks can help institutions to develop appropriate risk management strategies in case problems should arise.

Conclusions

This study examined the role of the body in online learning and concluded that by excluding the body, some types of knowledge are also excluded. Consequences of this exclusion include a failure to recognize diversity, learners feeling uncomfortable in

participating, bodily knowledge being ignored, and learners being excluded from certain learning environments. The solution to this exclusion is not simple; it involves the critical examination of policies and practices surrounding online learning. While no ultimate solution is offered, a number of recommendations for improving distance and online learning were presented along with suggestions for further research.

With distance and online learning appearing at all levels in the educational system, including elementary school (Sokoloff, 2002), the need to critically examine the field is becoming increasingly important. As the trend of offering distance learning does not appear to be slowing, considering this medium critically is essential. The experiences of learners and educators must both be presented to fully understand the situation. Questions as to the quality of education offered and the safety of the online environment are among the important issues to consider through multiple research methodologies.

Reference List

Adult Education Unit. (1994). *Adult learning and development: Module 2: Adult personal and cognitive development: The psychological view*. Edmonton, AB: Faculty of Extension, University of Alberta.

Åkerlind, G. S., & Trevitt, A. C. (1999). Enhancing self-directed learning through educational technology: When students resist the change. *Innovations in Education and Training International, 36*(2), 96-105.

American Distance Education Consortium [ADEC]. (2003). *ADEC Guiding Principles for Distance Teaching and Learning.* Retrieved May 11, 2003 from http://www.adec.edu/admin/papers/distance-teaching_principles.html

American Distance Education Consortium [ADEC]. (2002). *ADEC Guiding Principles for Distance Learning.* Retrieved May 11, 2003 from http://www.adec.edu/admin/papers/distance-learning_principles.html

Anderson, T. (2001). The hidden curriculum in distance education: An updated view. *Change, 33*(6), 28-35.

Anderson, T. D., & Garrison, D. R. (1998). Learning in a networked world: New roles and responsibilities. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 97-112). Madison, WI: Atwood Publishing.

Anglia Polytechnic University [APU]. (n.d.). *Narrative research @ APU.* Retrieved March 16, 2003 from http://www.apu.ac.uk/narratives

Arbaugh, J. B. (2000). An exploratory study of the effects of gender on student learning and class participation in an Internet-based MBA course. *Management Learning,*

31(4), 533–549. Retrieved January 29, 2003 from ProQuest Database

Arger, G. (1990). Distance education in the third world: Critical analysis on the promise and reality. *Open Learning, 5*(2), 9-18.

Australian National Training Authority, Brisbane. (1997). *Working towards 2010: Flexibly delivered staff development.* Brisbane, Australia: Australian National Training Authority. (ERIC Document Reproduction Service No. ED420784)

Balsamo, A. (1999). Forms of technological embodiment: Reading the body in contemporary culture. In J. Price & M. Shildrick (Eds.), *Feminist theory and the body: A reader* (pp. 278-289). Edinburgh: Edinburgh University Press.

Balsamo, A. (2000). The virtual body in cyberspace. In D. Bell & B. M. Kennedy (Eds.), *The cyberculture reader* (pp. 489-503). London: Routledge.

Barker, K. (2002). *Canadian recommended e-learning guidelines (CanREGs).* Retrieved May 11, 2003 from http://www.col.org/newsrelease/CanREGs%20Eng.pdf

Battersby, C. (1999). Her body/her boundaries. In J. Price & M. Shildrick (Eds.), *Feminist theory and the body: A reader* (pp. 341-358). Edinburgh: Edinburgh University Press.

Beckett, D. (1998). Disembodied learning: How flexible delivery shoots higher education in the foot, well sort of. *Electronic Journal of Sociology, 3* (3). Retrieved March 25, 2002 from http://www.sociology.org/content/vol003.003/beckett.html

Belenky, M., Clinchy, B., Goldberger, N. & Tarule, J. (1986). *Women's ways of knowing: The development of self, voice, and mind.* New York: Basic Books.

Bell, D. (2001). *An introduction to cybercultures.* London: Routledge.

Bell, D. & Kennedy, B. M. (eds). (2000). *The cybercultures reader.* New York:

Routledge.

Berge, Z. L. (2002). *Zane L Berge's home page for emoderators.* Retrieved July 19, 2003 from http://www.emoderators.com/zberge.shtml

Berge, Z. L., & Muilenberg, L. (2003). *Survey of student barriers to elearning.* Retrieved July 19, 2003 from http://www.umbc.edu/oit/phonetree/student_barriers/survey.html

Bernstein, S. L. (2002). Lonely learners. *LiNE Zine.* Retrieved December 12, 2002 from http://www.linezine.com/7.2/articles/ssll.htm

Bey, H. (2001). The information war. In D. Trend (Ed.), *Reading digital culture* (pp. 115-122). Malden, MA: Blackwell.

Birke, L. (1999). Bodies and biology. In J. Price & M. Shildrick (Eds.), *Feminist theory and the body: A reader* (pp. 42-49). Edinburg: Edinburg University Press.

Boler, M. (1999). *Feeling power: Emotions and education.* New York: Routledge.

Bradley, A. (1998). Building a better teaching force: Everyone can raise their hands. *Education Week, 18*(5), 45-47.

Bramble, M. (1999). "That really wasn't me" A black, immigrant, Caribbean woman's attempt to be/long in the academy. *Canadian Women's Studies, 19*(3), 134-140.

Bramble, M. (2000). Being me in the academy. In C. E. James (Ed.), *Experiencing difference* (pp. 271-282). Halifax, NS: Fernwood.

Brander, H. (2000). The model of studying in professional distance education on-line programs at the centre for extension studies in Turku University. In Wagner, E. & Szücs, A. (Eds.), *Research and innovation in open and distance learning: Book of essays of the First Research workshop of EDEN held in Prague, Czech Republic,*

16-17 March, 2000, pp. 51-53. Budapest, Hungary: EDEN Secretariat. Retrieved April 20, 2002 from http://www.eden.bme.hu/papers/EDEN-Prague.pdf

Brook, B. (1999). *Feminist perspectives on the body*. New York: Longman.

Bullough, R. V., Jr., & Pinnegar, S. (2001). Guidelines for quality in autobiographical forms of self-study research. *Educational Research, 30*(3), 13-21.

Burge, E. (1998). Gender in distance education. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 25-45). Madison, WI: Atwood Publishing.

Burge, E. J., Laroque, D., & Boak, C. (2000). Baring professional souls: Reflections on web life. *Journal of Distance Education, 15*(1), 81-98.

Butler, J. (1993). *Bodies that matter: On the discursive limits of "sex."* New York: Routledge.

Caldwell, M. (1999). *A short history of rudeness: Manners, morals, and misbehaviours in modern America.* New York: Picador USA.

Cambridge University. (2003). *Cambridge advanced learner's dictionary*. Cambridge: Cambridge University Press. Retrieved May 4, 2003 from http://dictionary.cambridge.org/define.asp?key=52929&dict=CALD

Campus Manitoba [CMB]. (n.d.). *Why study with CMB?* Retrieved April 7, 2003 from http://www.campusmanitoba.com/main/why.html

Canadian Federation of Students [CFS]. (2000, September). *Online learning: compromising quality*. (Brief). Retrieved March 27, 2003 from http://www.cfs-fcee.ca/pre_policy/submissions/sub-200009-online.pdf

Canadian Federation of Students-National Graduate Caucus [NGC]. (2001). *National*

Graduate Caucus Report: Conference on online learning. Retrieved March 27, 2003 from http://www.cfs-fcee.ca/pre_policy/factsheets/ma-200111-ngc.pdf

Canadian Virtual University [CVU]. (2002). *Is distance learning for me?* Retrieved April 1, 2003 from http://www.cvu-uvc.ca/DLforMe.html

Canadian Virtual University [CVU]. (2003a). *Canadian Virtual University - Contacts.* Retrieved March 16, 2003 from http://www.cvu-uvc.ca/contacts.html

Canadian Virtual University [CVU]. (2003b). *Canadian Virtual University - Home* Retrieved April 1, 2003 from http://www.cvu-uvc.ca/english.html

Centre for International University Cooperation. (n.d.). *ISOC - Outputs by Target Group.* Retrieved June 16, 2003 from http://siu.no/isocenglish.nsf/va_OutputsByTaget

Chapman, V.-L. (1998, May). *Adult education and the body: Changing performances of teaching and learning.* Paper presented at the 39th Annual Adult Education Research Conference, San Antonio, Texas, May 15-16, 1998. Retrieved April 3, 2002 from http://www.edst.educ.ubc.ca/aerc/1998/98chapman.htm

Cheng, K.-M. (1998, November). *The Asian distance learner.* Paper presented at the 12th Annual Conference of the AAOU, Hong Kong, China, November 4-6, 1998.

Chyung, S. Y. (2001). Systematic and systemic approaches to reducing attrition rates in online higher education. *American Journal of Distance Education, 15*(3), 36-49.

Ciccocioppo, L (1998, February 6). Tentative single-source deal with Coca-Cola means dollars for students [Electronic version]. *Folio.* Retrieved July 19, 2003 from http://www.ualberta.ca/~publicas/folio/35/11/07.HTM

Civin, M. A. (2000). *Male, female, email: The struggle for relatedness in a paranoid*

society. New York: Other Press.

Clandinin, D. J., & Connelly, F. M. (2000). *Narrative inquiry: Experience and story in qualitative research.* San Francisco: Jossey-Bass Publishers.

Cole, M., & Wertsch, J. V. (n.d.). *Beyond the individual-social antimony in discussions of Piaget and Vygotsky*. Retrieved May 1, 2003 from http://www.massey.ac.nz/~alock/virtual/colevyg.htm

Commonwealth of Learning [COL]. (n.d.). *Publications.* Retrieved June 16, 2003 from http://www.col.org/resources/publications

Commonwealth of Learning [COL]. (2000). *An introduction to open and distance learning.* Retrieved April 14, 2003 from http://www.col.org/resources/startupguides/intro_learning.htm

Connelly, F. M., & Clandinin, J. (1999). Narrative inquiry. In J. P. Keeves & G. Lakomski (Eds.), *Issues in Education Research* (pp. 132-140). Amsterdam: Pergamon.

Connelly, F. M., & Clandinin, J. (1990). Stories of experience and narrative inquiry. *Educational Researcher, 19*(4), 2 - 14.

Constructivist theory (J. Bruner). (n.d.). Retrieved April 27, 2003 from http://tip.psychology.org/bruner.html

Creswell, J. W., & Maietta, R. C. (2002). Part 4: Qualitative research. In D. C. Miller & N. J. Salkind (Eds.), *Handbook of research design and social measurement* (6th ed.) (pp. 143-197). Thousand Oaks, CA: Sage Publications.

Crowston, K., & Kammerer, E. (1998). Communicative style and gender differences in computer-medicated communications. In B. Edo (Ed.), *Cyberghetto or cybertopia:*

Race, class, and gender on the Internet (pp. 185-203). Westport, CT: Praeger.

CyberAtlas staff. (2002). *Men still dominate worldwide Internet use.* Retrieved January 28, 2003 from http://cyberatlas.Internet.com/big_picture/demographics/article/0,,5901_959421,00.html

Cyrs, T. E. (Ed.). (1997). Teaching and learning at a distance: What it takes to effectively design, deliver and evaluate programs. *New Directions for Teaching and Learning, 71.* San Francisco: Jossey-Bass.

Davis, B., Sumara, D., & Luce-Kapler, R. (2000). *Engaging minds: Learning and teaching in a complex world.* Mahwah, NJ: Lawrence Erlbaum Associates.

Denzin, N. K. (1999). Biographical Research Methods. In J. P. Keeves & G. Lakomski (Eds.), *Issues in Education Research* (pp. 92-102). Amsterdam: Pergamon.

Descartes, R. (1901). *DesCartes' meditations* (J. Veitch, Trans.). (Original work published 1641). Retrieved April 5, 2002 from http://philos.wright.edu/DesCartes/Meditations.html

June 2003, available from http://philos.wright.edu/DesCartes/MedE.html

European Distance Education Network [EDEN]. (n.d.). *Publications and Information Services.* Retrieved June 16, 2003 from http://www.eden.bme.hu/contents/publications/100.html

Faith, K. (1988). Naming the problem. In K. Faith (Ed.), *Towards new horizons for women in distance education: International perspectives* (pp. 3-18). London: Routledge.

Fox, L., Zakely, J., Morris, R., & Jundt, M. (1993). Orientation as a catalyst: Effective retention through academic and social integration. *Designing Successful*

Transitions: A Guide for Orienting Students to College. (Monograph Series Number 13, pp. 49-59). Columbia, SC: South Carolina University, National Resource Center for the Freshman Year Experience. (ERIC Document Reproduction Service No. ED 368239)

Froese-Germain, B. (2001). A critical approach to technology ≠ an anti-technology approach: Putting education & technology in context. In M. Moll (Ed.), *But it's only a tool! The politics of technology and education reform* (pp. 1-13). Ottawa: Canadian Centre for Policy Alternatives.

Gardner, J. N., & Hansen, D. A. (1993). Perspectives on the future of orientation. *Designing Successful Transitions: A Guide for Orienting Students to College. (Monograph Series Number 13, pp. 183-194).* Columbia, SC: South Carolina University, National Resource Center for the Freshman Year Experience. (ERIC Document Reproduction Service No. ED 368239)

Gergen, M., Chrisler, J. C., & LoCicero, A. (1999). Innovative methods: Resources for research, publishing, and teaching. In E. B. Kimmel & M. Crawford (Eds.), *Innovations in feminist psychological research* (pp. 429-454). Cambridge: Cambridge University Press.

Gibson, C. C. (1998a). The distance learner in context. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 113-125). Madison, WI: Atwood Publishing.

Gibson, C. C. (1998b). The distance learner's academic self-concept. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 65-76). Madison, WI: Atwood Publishing.

Gibson, C. C. (1998c). Editor's notes. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. vii-x). Madison, WI: Atwood Publishing.

Glassman, M. (2001). Dewey and Vygotsky: Society, experience, and inquiry in educational practice. *Educational Researcher, 30*(4), 3-14.

Global Knowledge Partnership. (2002). *ICT and education.* Retrieved June 16, 2003 from http://www.globalknowledge.org/gkps_portal/thematic.cfm?& menuid=229&action=ThSubMain&thematicid=7

Gottschalk, T. H. (Ed.). (2002). *Guide #1: Distance Education: An Overview* . Retrieved April 10, 2002 from http://www.uidaho.edu/evo/dist1.html

Gottschalk, T. H. (Ed.). (2002a). *Guide #6: Computers in distance education.* Retrieved April 10, 2002 from http://www.uidaho.edu/evo/dist6.html

Graham, R. J. (1991). *Reading and writing the self: Autobiography in education and the curriculum.* New York: Teachers College, Columbia University.

Granger, D., & Benke, M. (1998). Supporting learners at a distance from inquiry through completion. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 127-137). Madison, WI: Atwood Publishing.

Gray, D. E. (1999). The Internet in lifelong learning: Liberation or alienation? *International Journal of Lifelong Education, 18*(2), 119-126.

Griffiths, M. (1995). (Auto)biography and epistemology. *Educational Review, 47*(1), 75-88.

Grosz, E. A. (1994). *Volatile bodies: Towards a corporeal feminism.* Bloomington:

Indiana University Press.

Grosz, E. (1999a). Bodies-cities. In J. Price & M. Shildrick (Eds.), *Feminist theory and the body: A reader* (pp. 381-387). Edinburgh: Edinburgh University Press.

Grosz, E. (1999b). Psychoanalysis and the body. In J. Price & M. Shildrick (Eds.), *Feminist theory and the body: A reader* (pp. 267-272). Edinburgh: Edinburgh University Press.

Grumet, M. R. (1988). *Bitter milk: Women and teaching*. Amherst: University of Massachusetts Press.

Hara, N. & Kling, R. (1999). Students' frustration with a web-based distance education course. *First Monday, 4*(12). Retrieved July 13, 2003, from http://www.firstmonday.dk/issues/issue4_12/hara/index.html

Haraway, D. (1991). A cyborg manifesto: Science, technology, and socialist-feminism in the late Twentieth Century. *Simians, Cyborgs and Women: The Reinvention of Nature* (pp. 149-181). New York: Routledge. Retrieved February 4, 2003 from http://www.stanford.edu/dept/HPS/Haraway/CyborgManifesto.html

Haraway, D. (1997). *Modest_witness@Second_Millenium.FemaleMan©_Meets_OncoMouse™*. New York: Routledge.

Haraway, D. (2001). A manifesto for cyborgs. In D. Trend (Ed.), *Reading digital culture* (pp. 28-37). Malden, MA: Blackwell.

Hayles, N. K. (1999). *How we became posthuman: Virtual bodies in cybernetics, literature, and informatics*. Chicago: University of Chicago Press.

Healy, J. M. (1998). *Failure to connect: How computers affect our children's minds--for*

better and worse. New York: Simon & Schuster.

Heim, M. (2001). The erotic ontology of cyberspace. In D. Trend (Ed.), *Reading digital culture* (pp. 69-86). Malden, MA: Blackwell.

Herr Gillespie, K. with contributors. (1998). Using technology in faculty development: Practical examples. In Herr Gillespie, K. (Ed.), The Impact of Technology on Faculty Development, Life, and Work. *New Directions for Teaching and Learning, 76*, 79-92. San Francisco: Jossey-Bass.

Hooker, R. (1996). *René Descartes*. Retrieved April 5, 2002 from http://www.wsu.edu/~dee/ENLIGHT/DESCARTE.HTM

Howard, G. S., Maerlender, A. C., Myers, P. R., & Curtin, T.D. (1992). In stories we trust: Studies of the validity of autobiographies. *Journal of Counselling Psychology, 39*(3), 398-405.

Human Resources Development Canada, Office of Educational Technologies. (2002). *Welcome to the Office of Educational Technology.* Retrieved April 6, 2003 from http://olt-bta.hrdc-drhc.gc.ca/indexx.html

Institute for Higher Education Policy. (1999). *What's the difference? A Review of contemporary research on the effectiveness of distance learning in higher education.* Retrieved March 10, 2003 from http://www.ihep.com/Pubs/PDF/Difference.pdf

Institute for Higher Education Policy. (2000). *Quality on the line: Benchmarks for success in Internet-based distance education.* Retrieved March 10, 2003 from http://www.ihep.com/Pubs/PDF/Quality.pdf

Jackson, R. H. (2002). *Web based learning resources library.* Retrieved July 13, 2003

from http://www.knowledgeability.biz/weblearning/#Faculty%20and%20 Content%20 Development%20Issues

Jaffee, S., Kling, K. C., Plant, E. A., Sloan, M., & Hyde, J. S. (1999). The view from down here: Feminist graduate students consider innovative methodologies. In E. B. Kimmel & M. Crawford (Eds.), *Innovations in feminist psychological research* (pp. 421-428). Cambridge: Cambridge University Press.

Keeves, J. P., & Lakomski, G. (Eds.) (1999). *Issues in Education Research.* Amsterdam: Pergamon.

Kekkonen-Moneta, S., & Moneta, G. B. (2002). E-learning in Hong Kong: Comparing learning outcomes in online multimedia and lecture versions of an introductory computing course. *British Journal of Educational Technology, 33*(4), 423-433. Retrieved April 4, 2003, from the Blackwell Synergy database.

Kember, D. (1994). The teacher is more important than the medium: Pre-packaged instructional materials are not axiomatic with surface learning. *Distance Education, 15*(1), 153-159.

Kerka, S. (2002). *Trends and issues alert No. 32: Somatic/embodied learning and adult education.* Retrieved March 25, 2002 from http://ericacve.org/docgen.asp?tbl=tia&ID=155

Kirby, V. (1997). *Telling flesh.* London: Routledge.

Knapczyk, D., Brush, T., Rodes, P. G. & Marche, T. (1993). Continuing teacher education through distance learning and audiographics. *Technical Horizons in Education Journal, 20*, 74-77.

Knipe, D., & Lee, M. (2002). The quality of teaching and learning via videoconference.

British Journal of Educational Technology, 33(3), 301-311. Retrieved April 4, 2003, from the Blackwell Synergy database.

Krallman, D., & Holcomb, T. (1997). First-year student expectations: Pre- and post-orientation. *Paper presented at the Annual Meeting of the Association of Institutional Research, Buena Vista, FL.* (ERIC Document Reproduction Service No. ED 411731)

Labov, W., & Waletzky, J. (1967). Narrative analysis: oral versions of personal experience. In J. Helm (Ed.), *Essays on the verbal and visual arts: Proceedings of the 1966 annual spring meeting of the American Ethnological Society* (pp. 12-44). Seattle: University of Washington Press.

Lakoff, G., & Johnson, M. (1980). *Metaphors we live by.* Chicago: University of Chicago Press.

Lau, D. W. Y. (2000). Distance and open learning -- Web-based training (WBT) development process consideration. In *Vocational Education and Training for Life Long Learning in the Information Era: IVETA [International Vocational Education and Training Association] Conference Proceedings (Hong Kong, China, August 6-9, 2000).* (ERIC Document Reproduction Service No. ED446250).

Lewis, L., Snow, K., Farris, E., Levin, D., & Greene, B. (1999). *Distance education at postsecondary education institutions: 1997-98* (NCES publication No. 2000-013). Washington, DC: U.S. Department of Education, National Center for Education Statistics. Retrieved March 10, 2003 from http://nces.ed.gov/pubs2000/2000013.pdf

Light, P., & Light, V. (1999). Analysing asynchronous learning interactions: Computer-mediated communication in a conventional undergraduate setting. In K. Littleton & P. Light (Eds.), *Learning with computers: Analysing productive interaction* (pp. 162-178). London: Routledge.

A lock on conversation. (2002, November 21). *Edmonton Journal*, p. H1.

Lupton, D. (1995). The embodied computer/user. In M. Featherstone & R. Burrows (Eds.), *Cyberspace/Cyberbodies/Cyberpunk: Cultures of technological embodiment* (pp. 97-112). London: Sage Publications.

MacKeracher, D. (1993). Women as learners. In T. Barer-Stein & J. A. Draper (Eds.), *The craft of teaching adults* (pp. 71-86). Toronto, ON: Culture Concepts Inc.

Maddux, C. D., & Johnson, D. L. (2001). The web in education: Asset or liability? *Computers in the Schools, 17*(3/4), 1-16.

McAdams, D. P. (1996). *The stories we live by: Personal myths and the making of the self.* New York: Guilford Press.

McClelland, J., Dahlberg, K., & Plihal, J. (2002). Learning in the ivory tower: Students' embodied experience. *College Teaching, 50*(1), 4-8.

Memorial University of Newfoundland [MUN]. (n.d.). *Receive you M.Ed. @ Home.* [Flyer] St. John's, NL: Memorial University.

Memorial University of Newfoundland [MUN]. (2001). *School of Continuing Education.* Retrieved April 1, 2003 from http://www.distance.mun.ca

Memorial University of Newfoundland [MUN]. (2003a). *Distance education and learning technologies.* Retrieved July 13, 2003 from http://www.distance.mun.ca/goto.php?S=fees

Memorial University of Newfoundland [MUN]. (2003b). *School of Graduate Studies.* Retrieved July 19, 2003 from http://www.mun.ca/regoff/calendar/GradStudMSW.htm

Merriam, S. B., & Caffarella, R. S. (1999). *Learning in adulthood: A comprehensive guide* (2nd ed.). San Francisco: Jossey-Bass Publishers.

Merriam-Webster. (2003). *Merriam-Webster Online*. Retrieved July 19, 2003 from http://www.m-w.com

Meyer, K. (1998). Reflections on being female in school science: Towards a praxis of teaching science [Electronic version]. *Journal of Research in Science Teaching, 35*(4), 463-471. Retrieved March 25, 2002 from http://www3.interscience.wiley.com/cgi-bin/fulltext?ID=31849&PLACEBO=IE.pdf

Meyer, K. (2000). Looking for science in all the wrong places. In C. E. James (Ed.), *Experiencing difference* (pp. 78-88). Halifax, NS: Fernwood.

Mishler, E. G. (1995). Models of narrative analysis: A typology. *Journal of Narrative and Life History, 5*(2), 87-123.

Moore, M. G. (1998). Introduction. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 1-7). Madison, WI: Atwood Publishing.

Morse, M. (2001). Virtually female: Body and code. In D. Trend (Ed.), *Reading digital culture* (pp. 87-97). Malden, MA: Blackwell.

Moshinskie, J. (2001). How to keep e-learners from e-scaping. *Journal of Interactive Instruction Development, 14*(1), 8-11.

National Staff Development Council [NSDC]. (2001a). *E-Learning for educators: Implementing the standards for staff development*. Retrieved April 20, 2002 from http://www.nsdc.org/e-learning.pdf

National Staff Development Council [NSDC]. (2001b). *NSDC Standards for Staff Development (Revised, 2001)*. Retrieved April 20, 2002 from http://www.nsdc.org/library/standards2001.html

Nielsen/Netratings. (2003). *Global Internet population grows an average of four percent year-over-year*. (Press Release). Retrieved June 16, 2003 from http://www.nielsen-netratings.com/news?jspsection=new_pr&thetype=date&theyear=2003&themonth=1

Noble, D. F. (1998). Digital diploma mills: The automation of higher education. *First Monday, 3*(1). Retrieved March 27, 2003, from http://www.firstmonday.dk/issues/issue3_1/noble/#d5

Noble, D. F. (2001). *Digital diploma mills: The automation of higher education*. New York: Monthly Review Press.

Norman, K. (1999). *Netiquette*. Retrieved April 10, 2002 from http://www.und.nodak.edu/instruct/knorman/workshop99/conduct.html

Online Learning E-News. (2002, March 5). *Keeping e-learners*. Online Learning E-News. Retrieved July 13, 2003 from http://www.ehs.unr.edu/programs/training/eNewsletters%5COnlineLearning%5COnlineLearning%5COnlineMar5_02.txt

Open and Distance Learning Quality Council [ODLQC]. (2002). *Open and Distance Learning Quality Council standards v.* Retrieved July 19, 2003 from http://dspace.dial.pipex.com/odlqc/st-5.htm

Open Learning Agency of British Columbia. (1994). *Open learning and distance education in Canada* (2nd ed.). Ottawa, ON: Canadian Heritage, Canadian Studies and Special Projects Directorate.

The Open University. (n.d.). *Courses & qualifications: Basic facts.* Retrieved June 16, 2003 from http://www3.open.ac.uk/courses/essential/info.shtm

Operant Conditioning (B. F. Skinner). (n.d.). Retrieved July 19, 2003 from http://tip.psychology.org/skinner.html

Osborn, V. (2001). Identifying at-risk students in videoconferencing and web-based distance education. *The American Journal of Distance Education, 15*(1), 41-54.

Oudshoorn, N. (1988). Towards a more women-centred approach for distance education curriculum. In K. Faith (Ed.), *Towards new horizons for women in distance education: International perspectives* (pp. 264-274). London: Routledge.

Pagano, J. A., & Miller, J. L. (1993). Women and education: In what ways does gender affect the educational process? In J. L. Kincheloe & S. R. Steinberg (Eds.), *Thirteen questions: Reframing education's conversation* (pp. 141-158). New York: Peter Lang Publishing, Inc.

Pastore, M. (2001). *Internet gender gap remains in Canada.* Retrieved June 13, 2003 from http://cyberatlas.internet.com/big_picture/geographics/article/0,,5911_737081,00.html

Perraton, H. (2000). *Open and distance learning in the developing world.* New York: Routledge.

Perrin, D. G. (2002). Myth and reality [Electronic version]. *USDLA Journal, 16*(1). Retrieved April 5, 2003 from

http://www.usdla.org/html/journal/JAN02_Issue/editor.html

Picciano, A. G. (2001). *Distance learning: Making connections across virtual space and time.* Upper Saddle River, NJ: Merrill Prentice Hall.

Polanyi, M. (1967). *The tacit dimension.* London: Routledge and K. Paul.

Pollard, E., & Liebeck, H. (Eds.) (2000). *The Oxford paperback dictionary* (4th ed.). Oxford: Oxford University Press.

Population Reference Bureau. (2002). *2002 world population data sheet of the Population Reference Bureau.* Retrieved June 16, 2003 from http://www.prb.org

Price, J., & Shildrick, M. (Eds.). (1999). *Feminist theory and the body: A reader.* Edinburg: Edinburg University Press.

Prichard, C. (1999, July). *Embodied knowing, knowledge management and the reconstruction of post-compulsory education.* Paper presented at the Critical Management Studies Conference, University of Manchester, England, July 14-16, 1999. Retrieved March 25, 2002 from http://www.mngt.waikato.ac.nz/research/ejrot/cmsconference/papers_infoknow.htm

Porter, R. (1991). History of the body. In P. Burke (Ed.), *New perspectives on historical writing* (pp. 206-232). Cambridge, UK: Polity Press.

Postman, N. (1992). *Technopoly: The surrender of culture of technology.* New York: Alfred A. Knopf.

Richard, E. (n.d.). *Cybermanners.* Retrieved April 11, 2002 from http://www.edu.pe.ca/resources/training/workshop/howto/starter/07.html

Riegler, A. (2000). *What is radical constructivism and who are its proponents?.* Retrieved May 1, 2003 from http://www.univie.ac.at/constructivism/about.html

Rogan, J. M. (1997). Online mentoring: Reflections and suggestions. *Journal of Computing in Teacher Education, 13*(3), 5-13.

Royal Roads University. (2002). *RRU FAQs*. Retrieved July 20, 2003 from http://www.royalroads.ca/Channels/for+learners/prospective+learners/rru+frequently+asked+questions/default.htm

Sanchez, I., & Gunawardena, C. N. (1998). Understanding and supporting the culturally diverse distance learner. In C. C. Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 47-64). Madison, WI: Atwood Publishing.

Shade, L. R. (2002). *Gender and community in the social construction of the Internet.* New York: Peter Lang.

Shildrick, M. with Price, J. (1999). Openings in the body: A critical introduction. In J. Price & M. Shildrick (Ed.), *Feminist theory and the body: A reader* (pp. 1-14). Edinburgh: Edinburgh University Press.

Simmonds, F. N. (1999). My body, myself. In J. Price & M. Shildrick (Ed.), *Feminist theory and the body: A reader* (pp. 50-63). Edinburgh: Edinburgh University Press.

Sofia, Z. (1993). *Whose second self? Gender and (ir)rationality in computer culture.* Geelong, Victoria, Australia: Deakin University Press.

Sokoloff, H. (2002, December 10). First virtual elementary school in Canada opens. *National Post*, p. A2.

Spender, D. (1995). *Nattering on the net: Women, power and cyberspace*. Toronto: Garamond Press Ltd.

Statistics Canada. (1999). Retrieved July 19, 2003 from http://www.statcan.ca/Daily/English/9990423/d990423b.htm

Statistics Canada. (2003). *Canadian statistics: Culture, leisure and travel.* (CANSIMM II, Table 358-0005, Catalogue # 56F0004MIE). Retrieved June 13, 2003 from http://www.statcan.ca/english/Pgdb/cultur.htm

Stinson, S. W. (1995). Body of knowledge. *Educational Theory on the Web, 45*(1). Retrieved April 3, 2002 from http://www.ed.uiuc.edu/EPS/Educational-Theory/Contents/45_1_Stinson.asp

Stuhlmiller, C. M. (2001). Narrative methods in qualitative research: Potential for therapeutic transformation. In C. R. Figley (Series Ed.) & K. R. Gilbert (Vol. Ed.), *Innovations in psychology: The emotional nature of qualitative research* (pp. 63-80). Boca Raton, FL: CRC Press.

Sullivan, E., & Rocco, T. (1997). A credo for going the distance [Electronic Version]. *The Agenda, Fall/Winter 96/97.* Retrieved May 11, 2003 from http://www.pbs.org/als/agenda/articles/credo.html

Tait, A. (1994). The end of innocence: Critical approaches to open and distance learning. *Open Learning, 9*(3), 27-36.

Taylor, J. C. (n.d.). *Fifth generation distance education.* Retrieved April 6, 2003 from http://www.icde.org/oslo/icde.nsf/id/FD5130FDCE096DA341256C3F00397748?OpenDocument&cat=m1_12_2

Taylor, T. L. (1999). Life in virtual worlds: Plural existence, multimodalities, and other online research challenges [Electronic version]. *American Behavioral Scientist, 43*(3), 436-449. Retrieved January 29, 2003 from

http://social.chass.ncsu.edu/~ttaylor/papers/Taylor-Methods.pdf

Taylor, T. L. (2002a). Intentional bodies: Virtual environments and the designers who shape them [Electronic version]. *International Journal of Engineering Education.* Retrieved January 29, 2003 from http://social.chass.ncsu.edu/~ttaylor/papers/Taylor-Designers.pdf

Taylor, T. L. (2002b). Living digitally: Embodiment in virtual worlds. In R. Schroeder (Ed.), *The social life of avatars: Presence and interaction in shared virtual environments* (pp. 40-62). London: Springer-Verlag. Retrieved January 29, 2003 from http://social.chass.ncsu.edu/~ttaylor/papers/Taylor-LivingDigitally.pdf

TeleEducation NB. (n.d.). *The significant difference phenomenon.* Retrieved July 13, 2003 from http://teleeducation.nb.ca/significantdifference/index.cfm?searchstring=2002&category=year&dosearch=1

Thomas, A. M. (1991). Learning: Its significance to society. In A. M. Thomas, *Beyond education: A new perspective on society's management of learning* (pp. 1-18). San Francisco: Jossey-Bass Inc.

Thompson, M. M. (1998). Distance learners in higher education. In C. Campbell Gibson (Ed.), *Distance learners in higher education: Institutional responses for quality outcomes* (pp. 10-18). Madison, WI: Atwood Publishing. Also available online from http://wbweb4.worldbank.org/DistEd/Teaching/Design/kn-02.html

Tite, R. (2000). *Education 6100: Research designs and methods in education - Lecture 10.* Retrieved November 17, 2001 from http://courses.mun.ca/ed6100/contents/lecture10.html

Tompkins, J. (1996). *A life in school: What the teacher learned.* Reading, MA: Addison-

Wesley Publishing Company Inc.

Touchstone, A. J. L., & Anderson, E. T. (2001). *Guide #10: Interactive videoconferencing in distance education.* Retrieved April 10, 2002 from http://www.uidaho.edu/evo/dist10.html

Trend, D. (Ed.). (2001). *Reading digital culture.* Malden, MA: Blackwell.

Tsui, P. F., & Yue, I. K. M. (2000). E-learning in knowledge based society. In *Vocational Education and Training for Life Long Learning in the Information Era: IVETA [International Vocational Education and Training Association] Conference Proceedings (Hong Kong, China, August 6-9, 2000).* (ERIC Document Reproduction Service No. ED 446245)

Turkle, S. (1984). *The second self: Computers and the human spirit.* New York: Simon & Schuster.

Turkle, S. (1995). *Life of the screen: Identity in the age of the Internet.* New York: Simon & Schuster.

Turkle, S., & Papert, S. (1990). Epistemological pluralism: Styles and voices within the computer culture. *Signs: Journal of Women in Culture and Society, 16*(1), 128-157.

United States of America, Department of Commerce. (2000). *Falling through the net: Toward digital inclusion: A report on Americans' access to technology tools.* Retrieved June 13, 2003 from http://www.ntia.doc.gov/ntiahome/digitaldivide

Updegrove, D., & Updegrove, K. (1991). Computers and health - Individual and institutional protective measures [Electronic Version]. *Cause/Effect, 14*(3). Retrieved May 24, 2003 from http://www.educause.edu/pub/eq/eq.html

University College of Cape Breton [UCCB]. (2002). *Distance Education @ U.C.C.B.: Frequently asked questions.* Retrieved July 13, 2003 from http://www.uccb.ns.ca/distance/FAQ/index.htm

University of New Brunswick [UNB]. (n.d.). *CEL: Online Course Listings.* Retrieved July 13, 2003 from http://extend.unb.ca/oalp

van der Veer, R., & Valsiner, J. (1991). *Understanding Vygotsky: A quest for synthesis.* Oxford: Blackwell.

van der Veer, R., & Valsiner, J. (Eds.). (1994). *The Vygotsky reader.* Oxford: Blackwell.

Vojtek, B., & O'Brien Vojtek, R. (1997). Using technology to emancipate time [Electronic version]. *Journal of Staff Development, 18*(3). Retrieved April 20, 2002 from http://www.nsdc.org/library/jsd/jsd.htm

von Prümmer, C. (2000). *Women and distance education.* New York: Routledge.

Wakeford, N. (1999). Gender and the landscapes of computing in an Internet café. In M. Crang, P. Crang & J. May (Eds.), *Virtual geographies: Bodies, spaces and relations* (pp. 178-201). London: Routledge.

Wendell, S. (1999). Feminism, disability, and the transcendence of the body. In J. Price & M. Shildrick (Ed.), *Feminist theory and the body: A reader* (pp. 324-333). Edinburgh: Edinburgh University Press.

Willson, M. (1997). Community in the abstract: A political and ethical dilemma? In D. Holmes (Ed.), *Virtual politics: Identity and community in cyberspace* (pp. 145-162). London: Sage Publications.

Wolf, A. (1998). Exposing the great equalizer: Demythologizing Internet equity. In B. Edo (Ed.), *Cyberghetto or cybertopia: Race, class, and gender on the Internet* (pp.

15-32). Westport, CT: Praeger.

Zita, J. N. (1998). *Body talk: Philosophical reflections on sex and gender*. New York: Columbia University Press.

Zizek, S. (2001). From virtual reality to the virtualization of reality. In D. Trend (Ed.), *Reading digital culture* (pp. 17-22). Malden, MA: Blackwell.

Zuboff, S. (2001). Dilemmas of transformation in the age of the smart machine. In D. Trend (Ed.), *Reading digital culture* (pp. 125-132). Malden, MA: Blackwell.